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(54) Title: SPIROCYCLE INTEGRIN INHIBITORS

(57) Abstract

This invention relates to novel heterocycles, including (S)-2-phenylsulfonylamino-3-[[[8-(2-pyridinylaminomethyl)-]-1-oxa-2-azaspiro-[4,5]-dec-2-en-3-yl]carbonylamino]propionic acid, which are useful as antagonists of the $\alpha_v\beta_3$ integrin and related cell surface adhesive protein receptors, to pharmaceutical compositions containing such compounds, processes for preparing such compounds, and to methods of using these compounds, alone or in combination with other therapeutic agents, for the inhibition of cell adhesion, the treatment of angiogenic disorders, inflammation, bone degradation, cancer metastasis, diabetic retinopathy, thrombosis, restenosis, macular degeneration, and other conditions mediated by cell adhesion and/or cell migration and/or angiogenesis.

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TITLE

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Spirocycle Integrin Inhibitors

FIELD OF THE INVENTION

This invention relates to novel heterocycles which are useful as antagonists of the ανβ3 integrin and related cell surface adhesive protein receptors, to pharmaceutical compositions containing such compounds, processes for preparing such compounds, and to methods of using these compounds, alone or in combination with other therapeutic agents, for the inhibition of cell adhesion, the treatment of angiogenic disorders, inflammation, bone degradation, cancer metastasis, diabetic retinopathy, thrombosis, restenosis, macular degeneration, and other conditions mediated by cell adhesion and/or cell migration and/or angiogenesis.

BACKGROUND OF THE INVENTION

Angiogenesis or neovascularization is critical for normal physiological processes such as embryonic development and wound repair (Folkman and Shing, J. Biol. Chem. 1992, 267:10931-10934; D'Amore and Thompson, Ann. Rev. Physiol. 1987, 49:453-464). However, angiogenesis also occurs pathologically, for example, in ocular neovascularization (leading to diabetic retinopathy, neovascular glaucoma, retinal vein occlusion and blindness), in rheumatoid arthritis and in solid tumors (Folkman and Shing, J. Biol. Chem., 1992,

<u>267</u>:10931-10934; Blood and Zetter, Biochim. Biophys. Acta., 1990, <u>1032</u>:118-128).

Tumor dissemination, or metastasis, involves several distinct and complementary components, including the penetration and transversion of tumor cells through basement membranes and the establishment of self-sustaining tumor foci in diverse organ systems. To this end, the development and proliferation of new blood vessels, or angiogenesis, is critical to tumor survival. Without neovascularization, tumor cells lack the nourishment to divide and will not be able to leave the primary tumor site (Folkman and Shing, J. Biol. Chem., 1992, 267:10931-10934).

Inhibition of angiogenesis in animal models of cancer has been shown to result in tumor growth 15 suppression and prevention of metastatic growth (Herblin et al., Exp. Opin. Ther. Patents, 1994, 1-14). Many angiogenic inhibitors have been directed toward blocking initial cytokine-dependent induction of new vessel growth, e.g. antibodies to endothelial cell growth 20 factors. However, these approaches are problematic because tumor and inflammatory cells can secrete multiple activators of angiogenesis (Brooks et al., Cell, 1994, 79:1157-1164). Therefore, a more general approach that would allow inhibition of angiogenesis due 25 to a variety of stimuli would be of benefit.

angiogenic blood vessels in chick and man (Brooks et al., Science, 1994, 264:569-571; Enenstein and Kramer, J. Invest. Dermatol., 1994, 103:381-386). Integrin $\alpha_V \beta_3$ is the most promiscuous member of the integrin family, allowing endothelial cells to interact with a wide variety of extracellular matrix components (Hynes, Cell, 1992, 69:11-25). These adhesive interactions are considered to be critical for angiogenesis since

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The integrin $\alpha_{V}\beta_{3}$ is preferentially expressed on

vascular cells must ultimately be capable of invading virtually all tissues.

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While integrin $\alpha_{\nu}\beta_{3}$ promotes adhesive events important for angiogenesis, this receptor also transmits signals from the extracellular environment to the intracellular compartment (Leavesley et al., J. Cell Biol., 1993, 121:163-170, 1993). For example, the interaction between the $\alpha_{\nu}\beta_{3}$ integrin and extracellular matrix components promotes a calcium signal required for cell motility.

During endothelium injury, the basement membrane zones of blood vessels express several adhesive proteins, including but not limited to von Willebrand factor, fibronectin, and fibrin. Additionally, several members of the integrin family of adhesion receptors are expressed on the surface of endothelial, smooth muscle and on other circulating cells. Among these integrins is $\alpha_{\nu}\beta_{3}$, the endothelial cell, fibroblast, and smooth muscle cell receptor for adhesive proteins including von Willebrand factor, fibrinogen (fibrin), vitronectin, thrombospondin, and osteopontin. These integrins initiate a calcium-dependent signaling pathway that can lead to endothelial cell, smooth muscle cell migration and, therefore, may play a fundamental role in vascular cell biology.

Recently, an antibody to the $\alpha_{\nu}\beta_{3}$ integrin has been developed that inhibits the interaction of this integrin with agonists such as vitronectin (Brooks et al., Science, 1994, 264:569-571). Application of this antibody has been shown to disrupt ongoing angiogenesis on the chick chorioallantoic membrane (CAM), leading to rapid regression of histologically distinct human tumor transplanted onto the CAM (Brooks et al., Cell, 1994, 79:1157-1164). In this model, antagonists of the $\alpha_{\nu}\beta_{3}$ integrin induced apoptosis of the proliferating

angiogenic vascular cells, leaving pre-existing quiescent blood vessels unaffected. Thus, $\alpha_V\beta_3$ integrin antagonists have been shown to inhibit angiogenesis and are recognized as being useful as therapeutic agents for the treatment of human diseases such as cancer, restenosis, thromoembolic disorders, rheumatoid arthritis and ocular vasculopathies (Folkman and Shing, J. Biol. Chem., 1992, <u>267</u>:10931-10934).

Increasing numbers of other cell surface receptors

have been identified which bind to extracellular matrix
ligands or other cell adhesion ligands thereby mediating
cell-cell and cell-matrix adhesion processes. These
receptors belong to a gene superfamily called integrins
and are composed of heterodimeric transmembrane
glycoproteins containing α- and β-subunits. Integrin
subfamilies contain a common β-subunit combined with
different α-subunits to form adhesion receptors with
unique specificity. The genes for eight distinct
β-subunits have been cloned and sequenced to date.

20 The $\alpha_{\nu}\beta_{3}$ heterodimer is a member of the β_{3} integrin subfamily and has been described on platelets, endothelial cells, melanoma, smooth muscle cells, and osteoclasts (Horton and Davies, J. Bone Min. Res. 1989, 4:803-808; Davies et al., J. Cell. Biol. 1989, 109:1817-25 1826; Horton, Int. J. Exp. Pathol., 1990, 71:741-759). Like GPIIb/IIIa, the vitronectin receptor binds a variety of RGD-containing adhesive proteins such as vitronectin, fibronectin, VWF, fibrinogen, osteopontin, bone sialo protein II and thrombosponden in a manner 30 mediated by the RGD sequence. A key event in bone resorption is the adhesion of osteoclasts to the matrix of bone. Studies with monoclonal antibodies have implicated the $\alpha_{\nu}\beta_{3}$ receptor in this process and suggest that a selective $\alpha_{\nu}\beta_{3}$ antagonist would have utility in 35 blocking bone resorption (Horton et al., J. Bone Miner.

Res., 1993, 8:239-247; Helfrich et al., J. Bone Miner. Res., 1992, 7:335-343).

PCT Patent Application Publication Number W095/14683, published June 1, 1995 discloses isoxazoline and isoxazole fibrinogen receptor antagonists of general formula shown below:

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Copending, commonly assigned U.S. Patent Application Serial Number 08/455,768 filed 5/31/95 discloses integrin inhibitors of the general formula shown below:

PCT Patent Application Publication Number

W095/32710, published December 7, 1995 discloses
compounds for inhibition of osteoclast-mediated bone
resorption of general formula shown below:

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wherein Aryl is a 6-membered aromatic ring system.

None of the above references discloses or suggests the spirocyclic compounds of the present invention which are described in detail below.

SUMMARY OF THE INVENTION

The present invention provides novel nonpeptide

5 compounds which bind to integrin receptors thereby
altering cell-matrix and cell-cell adhesion processes.
The compounds of the present invention are useful for
the inhibition of cell adhesion and the treatment of
angiogenic disorders, inflammation, bone degradation,
10 cancer metastases, diabetic retinopathy, thrombosis,
restenosis, macular degeneration, and other conditions
mediated by cell adhesion and/or cell migration and/or
angiogenesis.

One aspect of this invention provides novel

compounds of Formula I (described below) which are useful as antagonists of the $\alpha_{\nu}\beta_{3}$ integrin, which is also referred to as the vitronectin receptor. The compounds of the present invention inhibit the binding of vitronectin or other RGD-containing ligands to $\alpha_{\nu}\beta_{3}$ and inhibit cell adhesion. The present invention also includes pharmaceutical compositions containing such compounds of Formula I, and methods of using such compounds for the inhibition of angiogenesis, and/or for the treatment of disorders mediated by angiogenesis.

Another aspect of the present invention comprises agents that inhibit the binding of vitronectin to the ανβ3 receptor for the treatment (including prevention) of thrombosis which do not significantly alter hemostatic balance and do not significantly inhibit platelet aggregation and do not significantly inhibit coagulation. Also the compounds of the current invention can be used for the treatment or prevention of restenosis.

The present invention also provides novel compounds, pharmaceutical compositions and methods which

may be used in the treatment or prevention of other diseases which involve cell adhesion processes, including, but not limited to, rheumatoid arthritis, asthma, allergies, adult respiratory distress syndrome, graft versus host disease, organ transplantation, septic shock, psoriasis, eczema, contact dermatitis, osteoporosis, osteoarthritis, atherosclerosis, metastasis, wound healing, diabetic retinopathy, ocular vasculopathies, thrombosis, inflammatory bowel disease and other autoimmune diseases.

Also included in the present invention are pharmaceutical kits comprising one or more containers containing pharmaceutical dosage units comprising a compound of Formula I, for the therapeutic inhibition of cell adhesion, the treatment of angiogenic disorders, inflammation, bone degradation, cancer metastasis, diabetic retinopathy, thrombosis, restenosis, macular degeneration, and other conditions mediated by cell adhesion and/or cell migration and/or angiogenesis.

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DETAILED DESCRIPTION OF THE INVENTION

The present invention provides novel nonpeptide compounds of Formula I (described below) which bind to integrin receptors thereby altering cell-matrix and cell-cell adhesion processes. The compounds of the present invention are useful for the inhibition of cell adhesion and the treatment of angiogenic disorders, inflammation, bone degradation, cancer metastases, diabetic retinopathy, thrombosis, restenosis, macular degeneration, and other conditions mediated by cell adhesion and/or cell migration and/or angiogenesis, in a mammal.

One aspect of this invention provides novel 35 compounds of Formula I which are useful as antagonists

of the $\alpha_{\nu}\beta_{3}$ or vitronectin receptor. The compounds of the present invention inhibit the binding of vitronectin and other RGD-containing ligands to $\alpha_{\nu}\beta_{3}$ and inhibit cell adhesion. The present invention also includes pharmaceutical compositions containing such compounds of Formula I, and methods of using such compounds for the inhibition of angiogenesis, and/or for the treatment of angiogenic disorders.

10 [1] The present invention comprises spirocyclic compounds of Formula I:

$$R^1-Q-W-X-Y$$
(I)

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including stereoisomeric forms thereof, or mixtures of stereoisomeric forms thereof, or pharmaceutically acceptable salt or prodrug forms thereof wherein:

20 Q is selected from

$$-z \xrightarrow{A^{1}-N} \text{ or } -z \xrightarrow{A^{1}-N}_{R^{10a}}$$

A is selected from $-N(R^{10})$ -, $-C(R^{11})$ - or -O-;

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 A^1 is selected from -O- or $-N(R^{10})$ -;

Z is a spiro-fused 4-7 membered ring system (including the sprio atom) containing 0-2 heteroatoms selected from O, S, or N, said ring system optionally being substituted on carbon with keto, or being substituted on carbon or nitrogen independently with 0-2 R⁹ or R¹⁰ or R^{10a};

R1 is selected from:

$$R^{7}R^{6}N-V-$$
, $R^{8}-C-NR^{6}-V-$, $R^{8}R^{7}N-C-V-$, $R^{8}R^{7}N-C-NR^{6}-V-$;

B is independently selected from $-CH_2-$, -O-, $-N(R^2)-$, or -C(=O)-;

10 B^1 is independently selected from -CH₂- or -N(R³)-;

D is
$$-N(R^2)$$
-, -O-, -S-, -C(=O)- or -SO₂-;

E-F is
$$-C(R^4)=C(R^5)-$$
, $-N=C(R^4)-$, $-C(R^4)=N-$, or $-C(R^4)_2C(R^5)_2-$;

J, K, L and M are independently selected from $-C(R^4)$ -, $-C(R^5)$ - or -N-, provided that at least one of J, K, L and M is not -N-;

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 R^2 is selected from: H, C_1 - C_6 alkyl, $(C_1$ - C_6 alkyl)carbonyl, $(C_1-C_6 \text{ alkoxy})$ carbonyl; (C_1-C_6) alkyl)aminocarbonyl, C₃-C₆ alkenyl, C₃-C₇ cycloalkyl, C4-C11 cycloalkylalkyl, aryl, 5 heteroaryl(C_1 - C_6 alkyl)carbonyl, heteroarylcarbonyl, aryl C₁-C₆ alkyl, (C₁-C₆ alkyl)carbonyl, arylcarbonyl, C1-C6 alkylsulfonyl, arylsulfonyl, aryl(C1-C6 alkyl)sulfonyl, heteroarylsulfonyl, heteroaryl(C1-C6 10 alkyl)sulfonyl, aryloxycarbonyl, aryl(C1-C6 alkoxy) carbonyl, wherein said aryl groups are substituted with 0-2 substituents independently selected from the group consisting of C_1 - C_4 alkyl, C₁-C₄ alkoxy, halo, CF₃, and nitro;

- R^3 isselected from: H, C_1 - C_6 alkyl, C_3 - C_7 cycloalkyl, C_4 - C_{11} cycloalkylalkyl, aryl, aryl(C_1 - C_6 alkyl)-, or heteroaryl(C_1 - C_6 alkyl)-;
- 20 R⁴ and R⁵ are independently selected from: H, C₁-C₄
 alkoxy, NR²R³, halogen, NO₂, CN, CF₃, C₁-C₆ alkyl,
 C₃-C₆ alkenyl, C₃-C₇ cycloalkyl, C₄-C₁₁
 cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, (C₁-C₆
 alkyl)carbonyl, (C₁-C₆ alkoxy)carbonyl,
 25 arylcarbonyl;
- alternatively, when substituents on adjacent atoms, R⁴ and R⁵ can be taken together with the carbon atoms to which they are attached to form a 5-7 membered carbocyclic or 5-7 membered heterocyclic aromatic or non-aromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with 0-2 groups independently selected from: C₁-C₄ alkyl, C₁-C₄ alkoxy, halo, cyano, amino, CF₃, or NO₂;

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R^6 is selected from: H, C_1-C_4 alkyl, or benzyl;
       {\ensuremath{\mathsf{R}}}^7 and {\ensuremath{\mathsf{R}}}^8 are independently selected from: H, {\ensuremath{\mathsf{C}}}_1\text{-}{\ensuremath{\mathsf{C}}}_6
  5
              alkyl, C3-C7 cycloalkyl, C4-C11 cycloalkylalkyl,
              aryl, aryl(C_1-C_6 alkyl)-, or heteroaryl(C_0-C_6
              alkyl)-:
       U
              is selected from:
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              -N(R^6)(CH_2)_n-,
              -N(R^6)(CH_2)_mO-
              -N(R^6)(CH_2)_mN(R^7) -
              -N(R^6)(CH_2)_nS(O)_p-
              -N(R^6)C(=0)(CH_2)_{n}-;
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              -N(R^6)(CH_2)_mC(=0)-;
      V
              is selected from:
              -(CH_2)_{n^-}
              -(CH_2)_mO-(CH_2)_n-,
20
              -(CH_2)_mN(R^7)(CH_2)_{n-1}
              -(CH_2)_nS(O)_p(CH_2)_n-,
              -(CH_2)_mN(R^7)C(=0)(CH_2)_{n^-},
              -(CH_2)_nC(=O)N(R^7)(CH_2)_{n-1}
              -(CH_2)_nC(=0)(CH_2)_n-;
25
      R^9 is selected from H, C_1-C_4 alkyl, C_1-C_4 alkoxy, aryl,
             aryl(C_1-C_6 \ alkyl)-, (C_1-C_4 \ alkoxy) carbonyl, (C_1-C_4
             alkyl)carbonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, or C<sub>1</sub>-C<sub>4</sub>
             alkylaminosulfonyl;
30
      R^{10} is selected from: H, CO_2R^{17}, C(=0)R^{17}, C(=0)NR^{17}R^{20},
             -SO_2R^{17}, -SO_2NR^{17}R^{20}, C_1-C_6 alkyl substituted with 0-
             1^{\circ}R^{15}, C_3-C_6 alkenyl substituted with 0-1 R^{15}, C_3-C_7
             cycloalkyl substituted with 0-1 R^{15}, C_4-C_{11}
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             cycloalkylalkyl substituted with 0-1 R<sup>15</sup>, arvl
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substituted with 0-1 R^{15} or 0-2 R^{11} , or aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15} or 0-2 R^{11} ;

 R^{10a} is selected from: CO_2R^{17} , $C(=0)R^{17}$, $C(=0)NR^{17}R^{20}$, $-SO_2R^{17}$, $-SO_2NR^{17}R^{20}$, C_1 -C6 alkyl substituted with 0-1 R^{15} , C_3 -C6 alkenyl substituted with 0-1 R^{15} , C_3 -C7 cycloalkyl substituted with 0-1 R^{15} , C_4 -C11 cycloalkylalkyl substituted with 0-1 R^{15} , aryl substituted with 0-1 R^{15} or 0-2 R^{11} , or aryl $(C_1$ -C6 alkyl) - substituted with 0-1 R^{15} or 0-2 R^{11} ;

R¹¹-is selected from H, C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl, aryl(C₁-C₆ alkyl)-, (C₁-C₄ alkoxy)carbonyl, (C₁-C₄ alkyl)carbonyl, C₁-C₄ alkylsulfonyl, or C₁-C₄ alkylaminosulfonyl;

W is selected from:

C₁-C₄ alkylene,

 $-(C(R^{12})_2)_qO(C(R^{12})_2)_q-$,

 $-(C(R^{12})_2)_qC(=0)(C(R^{12})_2)_{q^-},$

 $-(C(R^{12})_2)_qC(=0)N(R^{13})-,$

 $-C(=0)-N(R^{13})-(C(R^{12})_2)_{q}$;

X is $-(C(R^{12})_2)_qC(R^{12})(R^{14})-C(R^{12})(R^{15})-$;

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alternatively, W and X can be taken together to be

R¹² is selected from H, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_7 cycloalkyl, C_4 - C_{10} cycloalkylalkyl, $(C_1$ - C_4 alkyl)carbonyl, aryl, or aryl(C_1 - C_6 alkyl)-;

 R^{13} is selected from H, C_1 - C_6 alkyl, C_3 - C_7 cycloalkylmethyl, or aryl(C_1 - C_6 alkyl)-

R¹⁴ is selected from:

H, C₁-C₆ alkylthio(C₁-C₆ alkyl)-, aryl(C₁-C₁₀ alkylthioalkyl)-, aryl(C₁-C₁₀ alkoxyalkyl)-, C₁-C₁₀ alkyl, C₁-C₁₀ alkoxyalkyl, C₁-C₆ hydroxyalkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl, C₃-C₁₀ cycloalkyl, C₃-C₁₀ cycloalkylalkyl, aryl(C₁-C₆ alkyl)-,

heteroaryl(C_1 - C_6 alkyl)-, aryl, heteroaryl, CO_2R^{17} , $C(=0)R^{17}$, or $CONR^{17}R^{20}$, provided that any of the above alkyl, cycloalkyl, aryl or heteroaryl groups may optionally be substituted independently with 0-1 R^{16} or 0-2 R^{11} ;

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R¹⁵ is selected from:

H, R^{16} , C_1 - C_{10} alkyl, C_1 - C_{10} alkoxyalkyl, C_1 - C_{10} alkylaminoalkyl, C_1 - C_{10} alkylaminoalkyl, $(C_1$ - C_{10} alkyl)carbonyl, aryl(C_0 - C_6 alkyl)carbonyl,

C1-C10 alkenyl, C1-C10 alkynyl ,C3-C10 cycloalkyl, C3-C10 cycloalkylalkyl, aryl(C1-C6 alkyl)-, heteroaryl(C1-C6 alkyl)-, aryl, heteroaryl, C02R17, C(=0)R17, CONR17R20, S02R17, or S02NR17R20, provided that any of the above alkyl, cycloalkyl, aryl or

heteroaryl groups may optionally be substituted independently with $0-2\ R^{11}$;

Y is selected from:

-COR¹⁹, -SO₃H, -PO₃H, tetrazolyl, -CONHNHSO₂CF₃, -CONHSO₂R¹⁷, -CONHSO₂NHR¹⁷, -NHCOCF₃, -NHCONHSO₂R¹⁷, -NHSO₂R¹⁷, -OPO₃H₂, -OSO₃H, -PO₃H₂, -SO₃H,

 $-SO_2NHCOR^{17}$, $-SO_2NHCO_2R^{17}$,

R¹⁶ is selected from:

 $-N(R^{20})-C(=0)-O-R^{17}$,

5 $-N(R^{20})-C(=0)-R^{17}$,

- $-N(R^{20})-C(=0)-NH-R^{17}$,
- $-N(R^{20})SO_2-R^{17}$, or
- $-N(R^{20})SO_2-NR^{20}R^{17};$
- 10 R^{17} is selected from:

 C_1-C_{10} alkyl, C_3-C_{11} cycloalkyl, aryl(C_1-C_6 alkyl)-, (C_1-C_6 alkyl)aryl, heteroaryl(C_1-C_6 alkyl)-, (C_1-C_6

alkyl)heteroaryl, arylaryl(C_1 - C_6 alkyl)-,

heteroarylaryl(C_1 - C_6 alkyl)-, arylheteroaryl(C_1 - C_6

alkyl)-, heteroarylheteroaryl(C_1 - C_6 alkyl)-,

heteroaryl, or aryl, wherein said aryl or

heteroaryl groups are optionally substituted with 0-3 substituents independently selected from the

group consisting of: C₁-C₄ alkyl, C₁-C₄ alkoxy,

20 aryl, halo, cyano, amino, CF3, and NO2;

R¹⁸ is selected from:

H,

 $-C(=0)-O-R^{17}$

25 $-C(=0)-R^{17}$,

 $-C(=0)-NH-R^{17}$,

 $-SO_2-R^{17}$, or

 $-SO_2-NR^{20}R^{17}$;

30 R¹⁹ is selected from: hydroxy,

 C_1-C_{10} alkyloxy,

```
C_3-C_{11} cycloalkyloxy,
             aryloxy,
             aryl(C_1-C_6 \ alkoxy)-,
             C<sub>3</sub>-C<sub>10</sub> alkylcarbonyloxyalkyloxy,
 5
             C_3-C_{10} alkoxycarbonyloxyalkyloxy,
             C_2-C_{10} alkoxycarbonylalkyloxy,
             C<sub>5</sub>-C<sub>10</sub> cycloalkylcarbonyloxyalkyloxy,
             C5-C10 cycloalkoxycarbonyloxyalkyloxy,
             C5-C10 cycloalkoxycarbonylalkyloxy,
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            C_7-C_{11} aryloxycarbonylalkyloxy,
            C_8-C_{12} aryloxycarbonyloxyalkyloxy,
            C_8-C_{12} arylcarbonyloxyalkyloxy,
            C5-C10 alkoxyalkylcarbonyloxyalkyloxy,
            C<sub>5</sub>-C<sub>10</sub> (5-alkyl-1,3-dioxa-cyclopenten-2-one-
15
            yl) methyloxy,
            C<sub>10</sub>-C<sub>14</sub> (5-aryl-1,3-dioxa-cyclopenten-2-one-
            yl)methyloxy, or
             (R^{11})(R^{12})N-(C_1-C_{10} \text{ alkoxy})-;
20
     R<sup>20</sup>
            is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl,
            C_4-C_{11} cycloalkylalkyl, aryl, aryl(C_1-C_6 alkyl)-, or
            heteroaryl(C1-C6 alkyl)-;
            is 1-2;
      m
25
            is 0-2;
      n
      p
            is 0-2;
            is 0-2; and
      q
      r
            is 0-2;
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     provided that:
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n, q, and r are chosen such that the number of in-chain atoms between ${\bf R}^{\bf l}$ and Y is in the range of 8-18.

[2] Preferred compounds of the invention as described above are spirocyclic compounds of Formula I:

 $R^1-Q-W-X-Y$

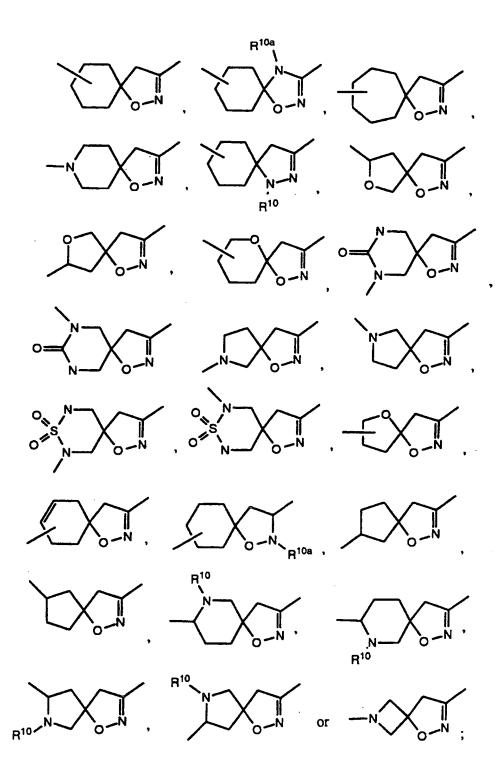
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(I)

including stereoisomeric forms thereof, or mixtures of stereoisomeric forms thereof, or pharmaceutically acceptable salt or prodrug forms thereof wherein:

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Q is selected from



R1 is selected from:

5

D is
$$-N(R^2)-$$
, $-O-$, $-S-$, $-C(=O)-$ or $-SO_2-$;

E-F is $-C(R^4)=C(R^5)-$, $-N=C(R^4)-$, $-C(R^4)=N-$, or $-C(R^4)_2C(R^5)_2-$;

- J, K, L and M are independently selected from $-C(\mathbb{R}^4)$ -, $-C(\mathbb{R}^5)$ or -N-, provided that at least one of J, K, L and M is not -N-;
- 15 R² is selected from: H, C_1 - C_6 alkyl, $(C_1$ - C_6 alkyl)carbonyl, $(C_1$ - C_6 alkoxy)carbonyl; $(C_1$ - C_6 alkyl)aminocarbonyl, C_3 - C_6 alkenyl, C_3 - C_7 cycloalkyl, C_4 - C_{11} cycloalkylalkyl, aryl, heteroaryl(C_1 - C_6 alkyl)carbonyl,
- 20 heteroarylcarbonyl, aryl $(C_1-C_6 \text{ alkyl})-$, $(C_1-C_6 \text{ alkyl})$ carbonyl, arylcarbonyl, $C_1-C_6 \text{ alkylsulfonyl}$,

arylsulfonyl, aryl(C_1 - C_6 alkyl)sulfonyl, heteroarylsulfonyl, heteroaryl(C_1 - C_6 alkyl)sulfonyl, aryloxycarbonyl, or aryl(C_1 - C_6 alkoxy)carbonyl, wherein said aryl groups are substituted with 0-2 substituents independently selected from the group consisting of C_1 - C_4 alkyl, C_1 - C_4 alkoxy, halo, CF_3 , and nitro;

R³ is selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl,

C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, or

heteroaryl(C₁-C₆ alkyl)-;

5

- R⁴ and R⁵ are independently selected from: H, C₁-C₄ alkoxy, NR²R³, halogen, NO₂, CN, CF₃, C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, (C₁-C₆ alkyl)carbonyl, (C₁-C₆ alkoxy)carbonyl, arylcarbonyl, or
- alternatively, when substituents on adjacent atoms, R4 and R5 can be taken together with the carbon atoms to which they are attached to form a 5-7 membered carbocyclic or 5-7 membered heterocyclic aromatic or non-aromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with 0-2 groups independently selected from: C1-C4 alkyl, C1-C4 alkoxy, halo, cyano, amino, CF3, or NO2;
- 30 R^6 is selected from: H, C_1 - C_4 alkyl, or benzyl;
 - R⁷ and R⁸ are independently selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, or heteroaryl(C₀-C₆ alkyl)-;

```
U
             is selected from:
             -N(R^6)(CH_2)_{n^-}
             -N(R^6)(CH_2)_mO-,
             -N(R^6)(CH_2)_mN(R^7)-
 5
             -N(R^6)(CH_2)_nS(O)_p-
             -N(R^6)C(=0)(CH_2)_{n}-;
             is selected from:
             -(CH_2)_{n^-}
10
             -(CH_2)_mO-(CH_2)_m-,
         - (CH<sub>2</sub>)<sub>m</sub>N(R<sup>7</sup>)(CH<sub>2</sub>)<sub>n</sub>-,
             -(CH_2)_nS(O)_p(CH_2)_{n-}
             -(CH_2)_mN(R^7)C(=0)(CH_2)_{n^-}
             -(CH_2)_nC(=0)N(R^7)(CH_2)_{n^-}
15
             -(CH_2)_nC(=0)(CH_2)_n-;
      R^9 is selected from H, C_1-C_4 alkyl, C_1-C_4 alkoxy, aryl,
             aryl(C_1-C_6 \ alkyl)-, (C_1-C_4 \ alkoxy) \ carbonyl, (C_1-C_4
             alkyl)carbonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, or C<sub>1</sub>-C<sub>4</sub>
20
             alkylaminosulfonyl;
      R^{10} is selected from: H, CO_2R^{17}, C(=0)R^{17}, C(=0)NR^{17}R^{20},
             -SO_2R^{17}, -SO_2NR^{17}R^{20}, C_1-C_6 alkyl substituted with 0-
             1 R<sup>15</sup>, C<sub>3</sub>-C<sub>6</sub> alkenyl substituted with 0-1 R<sup>15</sup>, C<sub>3</sub>-C<sub>7</sub>
25
             cycloalkyl substituted with 0-1 R15, C4-C11
             cycloalkylalkyl substituted with 0-1 R15, aryl
             substituted with 0-1 R^{15} or 0-2 R^{11}, or aryl(C<sub>1</sub>-C<sub>6</sub>
             alkyl) - substituted with 0-1 R<sup>15</sup> or 0-2 R<sup>11</sup>;
30
      R^{10a} is selected from: CO_2R^{17}, C(=0)R^{17}, C(=0)NR^{17}R^{20},
             -SO_2R^{17}, -SO_2NR^{17}R^{20}, C_1-C_6 alkyl substituted with 0-
             1 R^{15}, C_3-C_6 alkenyl substituted with 0-1 R^{15}, C_3-C_7
             cycloalkyl substituted with 0-1 R15, C4-C11
             cycloalkylalkyl substituted with 0-1 R<sup>15</sup>, aryl
35
```

substituted with 0-1 R^{15} or 0-2 R^{11} , or aryl(C₁-C₆ · alkyl)- substituted with 0-1 R^{15} or 0-2 R^{11} ;

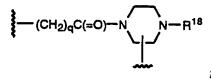
R¹¹ is selected from H, C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl,

aryl(C₁-C₆ alkyl)-, (C₁-C₄ alkoxy)carbonyl, (C₁-C₄
alkyl)carbonyl, C₁-C₄ alkylsulfonyl, or C₁-C₄
alkylaminosulfonyl;

W is selected from: C_1-C_4 alkylene, $-(C(R^{12})_2)_qO(C(R^{12})_2)_{q^-}$, $-(C(R^{12})_2)_qC(=0)(C(R^{12})_2)_{q^-}$, $-(C(R^{12})_2)_qC(=0)N(R^{13})_-$, $-C(=0)-N(R^{13})-(C(R^{12})_2)_{q^-}$;

15 X is $-(C(R^{12})_2)_qC(R^{12})(R^{14})-C(R^{12})(R^{15})_{-};$

alternatively, W and X can be taken together to be



20

R12 is selected from H, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, C₃-C₇ cycloalkyl, C₄-C₁₀ cycloalkylalkyl, (C₁-C₄ alkyl)carbonyl, aryl, or aryl(C₁-C₆ alkyl)-;

25

 R^{13} is selected from H, C_1 - C_6 alkyl, C_3 - C_7 cycloalkylmethyl, or aryl(C_1 - C_6 alkyl)-;

R¹⁴ is selected from:

30 H, C_1 - C_6 alkylthio(C_1 - C_6 alkyl)-, aryl(C_1 - C_{10} alkylthioalkyl)-, aryl(C_1 - C_{10} alkoxyalkyl)-, C_1 - C_{10} alkyl, C_1 - C_{10} alkoxyalkyl, C_1 - C_6 hydroxyalkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, C_3 - C_{10} cycloalkyl,

 C_3 - C_{10} cycloalkylalkyl, aryl(C_1 - C_6 alkyl)-, heteroaryl(C_1 - C_6 alkyl)-, aryl, heteroaryl, C_2 R¹⁷, C(=0)R¹⁷, or $CONR^{17}R^{20}$, provided that any of the above alkyl, cycloalkyl, aryl or heteroaryl groups may optionally be substituted independently with 0-1 R¹⁶ or 0-2 R¹¹;

R¹⁵ is selected from:

H, R¹⁶, C₁-C₁₀ alkyl, C₁-C₁₀ alkoxyalkyl,

C₁-C₁₀ alkylaminoalkyl, C₁-C₁₀ dialkylaminoalkyl,

(C₁-C₁₀ alkyl)carbonyl, aryl(C₀-C₆ alkyl)carbonyl,

C₁-C₁₀ alkenyl, C₁-C₁₀ alkynyl, C₃-C₁₀ cycloalkyl,

C₃-C₁₀ cycloalkylalkyl, aryl(C₁-C₆ alkyl)-,

heteroaryl(C₁-C₆ alkyl)-, aryl, heteroaryl, CO₂R¹⁷,

C(=0)R¹⁷, CONR¹⁷R²⁰, SO₂R¹⁷, or SO₂NR¹⁷R²⁰, provided that any of the above alkyl, cycloalkyl, aryl or heteroaryl groups may optionally be substituted independently with 0-2 R¹¹;

20 Y is selected from:

-COR¹⁹, -SO₃H, -PO₃H, tetrazolyl, -CONHNHSO₂CF₃, -CONHSO₂R¹⁷, -CONHSO₂NHR¹⁷, -NHCOCF₃, -NHCONHSO₂R¹⁷, -NHSO₂R¹⁷, -OPO₃H₂, -OSO₃H, -PO₃H₂, -SO₃H, -SO₂NHCOR¹⁷, -SO₂NHCO₂R¹⁷,

25

30

5

R¹⁶ is selected from:

$$-N(R^{20}) - C(=0) - O - R^{17},$$

 $-N(R^{20}) - C(=0) - R^{17},$

 $-N(R^{20})-C(=0)-NH-R^{17},$ $-N(R^{20})SO_2-R^{17},$ or $-N(R^{20})SO_2-NR^{20}R^{17}$;

R¹⁷ is selected from:

C₁-C₁₀ alkyl, C₃-C₁₁ cycloalkyl, aryl(C₁-C₆ alkyl)-,

(C₁-C₆ alkyl)aryl, heteroaryl(C₁-C₆ alkyl)-, (C₁-C₆
alkyl)heteroaryl, arylaryl(C₁-C₆ alkyl)-,
heteroarylaryl(C₁-C₆ alkyl)-, arylheteroaryl(C₁-C₆
alkyl)-, heteroarylheteroaryl(C₁-C₆ alkyl)-,
heteroaryl, or aryl, wherein said aryl or

heteroaryl groups are optionally substituted with 0-3 substituents independently selected from the group consisting of: C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl, halo, cyano, amino, CF₃, and NO₂;

15 R¹⁸ is selected from:

H.

 $-C(=0)-O-R^{17}$

 $-C(=0)-R^{17}$,

 $-C(=0)-NH-R^{17}$

20 $-SO_2-R^{17}$, or

-SO2-NR20R17;

R¹⁹ is selected from:

hydroxy,

 C_1-C_{10} alkyloxy,

C3-C11 cycloalkyloxy,

aryloxy,

 $aryl(C_1-C_6 alkoxy)-$

 C_3-C_{10} alkylcarbonyloxyalkyloxy,

30 C₃-C₁₀ alkoxycarbonyloxyalkyloxy,

C2-C10 alkoxycarbonylalkyloxy,

C₅-C₁₀ cycloalkylcarbonyloxyalkyloxy,

 C_5-C_{10} cycloalkoxycarbonyloxyalkyloxy,

C₅-C₁₀ cycloalkoxycarbonylalkyloxy,

35 C₇-C₁₁ aryloxycarbonylalkyloxy,

```
C<sub>8</sub>-C<sub>12</sub> aryloxycarbonyloxyalkyloxy,

C<sub>8</sub>-C<sub>12</sub> arylcarbonyloxyalkyloxy,

C<sub>5</sub>-C<sub>10</sub> alkoxyalkylcarbonyloxyalkyloxy,

C<sub>5</sub>-C<sub>10</sub> (5-alkyl-1,3-dioxa-cyclopenten-2-one-
yl)methyloxy,

C<sub>10</sub>-C<sub>14</sub> (5-aryl-1,3-dioxa-cyclopenten-2-one-
yl)methyloxy, or

(R<sup>11</sup>)(R<sup>12</sup>)N-(C<sub>1</sub>-C<sub>10</sub> alkoxy)-;
```

10 R²⁰ selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, or heteroaryl(C₁-C₆ alkyl)-;

```
m is 1-2;

15 n is 0-2;

p is 0-2;

q is 0-2; and

r is 0-2;
```

20 provided that:

n, q, and r are chosen such that the number of inchain atoms between \mathbb{R}^1 and Y is in the range of 8-18.

- [3] Further preferred compounds of the invention as described above are compounds of the Formula I including stereoisomeric forms thereof, or mixtures of stereoisomeric forms thereof, or pharmaceutically
- 30 acceptable salt or prodrug forms thereof wherein:

Q is selected from:

5 \mathbb{R}^1 is selected from:

wherein the above heterocycles are optionally substituted with 0-2 substituents selected from the group consisting of: NH₂, halogen, NO₂, CN, CF₃, C₁-C₄ alkoxy, C₁-C₆ alkyl, and C₃-C₇ cycloalkyl;

R² is selected from: H, C₁-C₄ alkyl or benzyl;

U is $-NH(CH_2)_{n^-}$;

10

V is $-(CH_2)_{n}-;$

 R^{10} is selected from: H, CO_2R^{17} , $C(=0)R^{17}$, $CONR^{17}R^{20}$, $-SO_2R^{17}$, $-SO_2NR^{17}R^{20}$, C_1 -C6 alkyl substituted with 0-1 R^{15} , C_3 -C6 alkenyl substituted with 0-1 R^{15} , C_3 -C7 cycloalkyl substituted with 0-1 R^{15} , C_4 -C11 cycloalkylalkyl substituted with 0-1 R^{15} , aryl substituted with 0-1 R^{15} or 0-2 R^{11} , or aryl(C_1 -C6 alkyl)- substituted with 0-1 R^{15} or 0-2 R^{11} ;

20

25

- R^{10a} is selected from: CO_2R^{17} , $C(=0)R^{17}$, $CONR^{17}R^{20}$, $-SO_2R^{17}$, $-SO_2NR^{17}R^{20}$, C_1 - C_6 alkyl substituted with 0-1 R¹⁵, C_3 - C_6 alkenyl substituted with 0-1 R¹⁵, C_4 - C_{11} cycloalkyl substituted with 0-1 R¹⁵, C_4 - C_{11} cycloalkylalkyl substituted with 0-1 R¹⁵, aryl substituted with 0-1 R¹⁵ or 0-2 R¹¹, or aryl(C_1 - C_6 alkyl)- substituted with 0-1 R¹⁵ or 0-2 R¹¹;
- R¹¹ is selected from H, C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl, aryl(C₁-C₆ alkyl)-, (C₁-C₄ alkoxy)carbonyl, (C₁-C₄ alkyl)carbonyl, C₁-C₄ alkylsulfonyl, or C₁-C₄ alkylaminosulfonyl;

W is $-C(=0)-N(R^{13})-;$

```
X is -CH(R^{14}) - CH(R^{15}) -;

R^{13} is H or CH_3;
```

5 R¹⁴ is selected from:

H, C_1 - C_{10} alkyl, aryl, or heteroaryl, wherein said aryl or heteroaryl groups are optionally substituted with 0-3 substituents independently selected from the group consisting of: C_1 - C_4 alkyl, C_1 - C_4 alkoxy, aryl, halo, cyano, amino, CF_3 , and NO_2 ;

R¹⁵ is H or R¹⁶;

15 Y is $-C(=0)R^{19}$;

10

R¹⁷ is selected from:

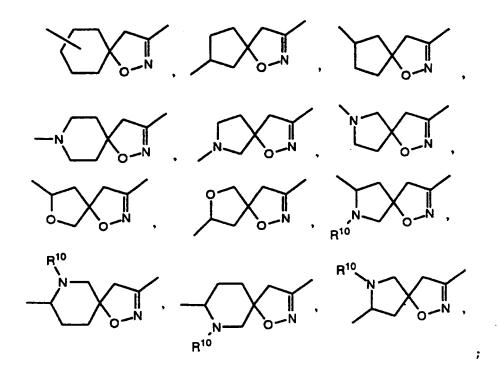
- $C_1-C_{10} \ alkyl, \ C_3-C_{11} \ cycloalkyl, \ aryl(C_1-C_6 \ alkyl)-, \\ (C_1-C_6 \ alkyl)aryl, \ heteroaryl(C_1-C_6 \ alkyl)-, \ (C_1-C_6 \ alkyl)-, \\ alkyl)heteroaryl, \ arylaryl(C_1-C_6 \ alkyl)-, \\ heteroarylaryl(C_1-C_6 \ alkyl)-, \ arylheteroaryl(C_1-C_6 \ alkyl)-, \\ alkyl)-, \ heteroarylheteroaryl(C_1-C_6 \ alkyl)-,$
- heteroaryl, or aryl, wherein said aryl or heteroaryl groups are optionally substituted with 0-3 substituents independently selected from the group consisting of: C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl, halo, cyano, amino, CF₃, and NO₂;

```
R19
           is selected from:
           hydroxy,
           C_1-C_{10} alkoxy,
           methylcarbonyloxymethoxy-,
  5
           ethylcarbonyloxymethoxy-,
           t-butylcarbonyloxymethoxy-,
           cyclohexylcarbonyloxymethoxy-,
           1-(methylcarbonyloxy)ethoxy-,
           1-(ethylcarbonyloxy)ethoxy-,
           1-(t-butylcarbonyloxy)ethoxy-,
. 10
           1-(cyclohexylcarbonyloxy)ethoxy-,
           i-propyloxycarbonyloxymethoxy-,
           t-butyloxycarbonyloxymethoxy-,
           1-(i-propyloxycarbonyloxy)ethoxy-,
 15
           1-(cyclohexyloxycarbonyloxy)ethoxy-,
           1-(t-butyloxycarbonyloxy)ethoxy-,
           dimethylaminoethoxy-,
           diethylaminoethoxy-,
           (5-methyl-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,
 20
           (5-(t-butyl)-1,3-dioxacyclopenten-2-on-4-
           yl)methoxy-,
           (1,3-dioxa-5-phenyl-cyclopenten-2-on-4-yl)methoxy-,
           or
           1-(2-(2-methoxypropyl)carbonyloxy)ethoxy-;
25
     R^{20} is H or CH_3; and
           is 0-1.
     n
30
          Still further preferred compounds of the above
      invention as described above are compounds of the
     Formula I including stereoisomeric forms thereof, or
     mixtures of stereoisomeric forms thereof, or
```

pharmaceutically acceptable salt or prodrug forms thereof wherein:

Q is selected from:

- 5



R1 is selected from:

 ${\ensuremath{\mbox{R}}}^2$ is selected from: H, ${\ensuremath{\mbox{C}}}_1\text{-}{\ensuremath{\mbox{C}}}_4$ alkyl, or benzyl;

5

U is $-NH(CH_2)_{n}$;

V is $-(CH_2)_{n-}$;

10 R¹⁰ is selected from: H, CO_2R^{17} , $C(=0)R^{17}$, $C(=0)NR^{17}R^{20}$, $-SO_2R^{17}$, $-SO_2NR^{17}R^{20}$, C_1-C_6 alkyl substituted with 0-1 R¹⁵, C_3-C_6 alkenyl substituted with 0-1 R¹⁵, C_3-C_7 cycloalkyl substituted with 0-1 R¹⁵, C_4-C_{11} cycloalkylalkyl substituted with 0-1 R¹⁵, aryl

substituted with 0-1 R^{15} or 0-2 R^{11} , or aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15} or 0-2 R^{11} ;

R^{10a} is selected from: CO_2R^{17} , $C(=O)R^{17}$, $CONR^{17}R^{20}$,

- SO_2R^{17} , - $SO_2NR^{17}R^{20}$, C_1 - C_6 alkyl substituted with 0-1 R¹⁵, C_3 - C_7 cycloalkyl substituted with 0-1 R¹⁵, C_4 - C_{11} cycloalkylalkyl substituted with 0-1 R¹⁵, aryl substituted with 0-1 R¹⁵ or 0-2 R¹¹, or aryl(C_1 - C_6 alkyl) - substituted with 0-1 R¹⁵ or 0-2 R¹¹;

R¹¹-is selected from H, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, aryl, aryl(C_1 - C_6 alkyl)-, (C_1 - C_4 alkoxy)carbonyl, (C_1 - C_4 alkyl)carbonyl, C_1 - C_4 alkylsulfonyl, or C_1 - C_4 alkylaminosulfonyl;

W is $-C(=0)-N(R^{13})-;$

X is $-CH(R^{14})-CH(R^{15})-$;

20

15

 R^{13} is H or CH_3 ;

R¹⁴ is selected from:

H, C₁-C₁₀ alkyl, aryl, or heteroaryl, wherein said aryl or heteroaryl groups are optionally substituted with 0-3 substituents independently selected from the group consisting of: C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl, halo, cyano, amino, CF₃, and NO₂;

30

 R^{15} is H or R^{16} ;

Y is $-C(=0)R^{19}$;

35 R¹⁶ is selected from:

```
-N(R^{20})-C(=0)-O-R^{17}.
            -N(R^{20})-C(=0)-R^{17},
            -N(R^{20})SO_2-R^{17},
R<sup>17</sup> is selected from:
           C_1-C_{10} alkyl, C_3-C_{11} cycloalkyl, aryl(C_1-C_6 alkyl)-,
            (C_1-C_6 \text{ alkyl}) aryl, heteroaryl(C_1-C_6 \text{ alkyl})-, (C_1-C_6 \text{ alkyl})-
           alkyl)heteroaryl, arylaryl(C1-C6 alkyl)-,
           heteroarylaryl(C_1-C_6 alkyl)-, arylheteroaryl(C_1-C_6
           alkyl)-, heteroarylheteroaryl(C1-C6 alkyl)-,
           heteroaryl, or aryl, wherein said aryl or
           heteroaryl groups are optionally substituted with
           0-3 substituents independently selected from the
           group consisting of: C_1-C_4 alkyl, C_1-C_4 alkoxy,
           aryl, halo, cyano, amino, CF3, and NO2;
R<sup>19</sup>
           is selected from:
          hydroxy,
          C_1-C_{10} alkoxy,
          methylcarbonyloxymethoxy-,
          ethylcarbonyloxymethoxy-,
           t-butylcarbonyloxymethoxy-,
```

1-(methylcarbonyloxy)ethoxy-,
25 1-(ethylcarbonyloxy)ethoxy-,
1-(t-butylcarbonyloxy)ethoxy-,
1-(cyclohexylcarbonyloxy)ethoxy-,

5

10

15

20

i-propyloxycarbonyloxymethoxy-,

t-butyloxycarbonyloxymethoxy-,

cyclohexylcarbonyloxymethoxy-,

30 1-(i-propyloxycarbonyloxy)ethoxy-,

1-(cyclohexyloxycarbonyloxy)ethoxy-,

1-(t-butyloxycarbonyloxy)ethoxy-,

dimethylaminoethoxy-,

diethylaminoethoxy-,

35 (5-methyl-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,

```
(5-(t-butyl)-1,3-dioxacyclopenten-2-on-4-
               yl)methoxy-,
          (1,3-dioxa-5-phenyl-cyclopenten-2-on-4-yl)methoxy-,
 5
          1-(2-(2-methoxypropyl)carbonyloxy)ethoxy-;
    R<sup>20</sup> is H or CH<sub>3</sub>; and
          is 0-1.
    n
10
        Specifically preferred compounds of the above
     invention are compounds including enantiomeric or
    diasteriomeric forms thereof, or mixtures of
15
    enantiomeric or diastereomeric forms thereof, or
    pharmaceutically acceptable salt or prodrug forms
    thereof, selected from the group consisting of:
          (S)-2-phenylsulfonylamino-3-[[[8-(2-
20
               pyridinylaminomethyl)-]-1-oxa-2-azaspiro-
               [4,5]-dec-2-en-3-yl]carbonylamino]propionic
               acid,
          (S)-2-benzyloxycarbonylamino-3-[[[8-(2-
               pyridinylaminomethyl)-]-1-oxa-2-azaspiro-
25
               [4,5]-dec-2-en-3-yl]carbonylamino]propionic
               acid,
          (S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-
               [[[8-(2-pyridinylaminomethyl)-]-1-oxa-2-
               azaspiro-[4,5]-dec-2-en-3-
30
               yl]carbonylamino]propionic acid,
          (S)-2-[(3,5-dimethylisoxazol4-yl)sulfonyl]amino-3-
               [[[8-(2-pyridinylaminomethyl)-]-1-oxa-2-
               azaspiro-[4,5]-dec-2-en-3-
               yl]carbonylamino]propionic acid,
```

	(S)-2-phenylsulfonylamino-3-[[[8-[(6-aminopyridin-
	2-y1)methy1]-]-1-oxa-2,8-diazaspiro-[4,5]-dec-
	2-en-3-yl]carbonylamino]propionic acid,
	(S)-2-phenylsulfonylamino-3-[[[8-[(6-aminopyridin-
5	2-y1)methyl]]-1-oxa-2,8-diazaspiro-[4,4]-non-
	2-en-3-yl]carbonylamino]propionic acid,
	(S)-2-phenylsulfonylamino-3-[[8-(2-
	pyridinylaminomethyl)-]-1-oxa-2-azaspiro-
	[4,4]-non-2-en-3-yl]carbonylamino]propionic
10	acid,
	(S)-2-phenylsulfonylamino-3-[[[8-[2-(4,5-
	dihydroimidazol-2-yl)aminomethyl]-]-1-oxa-2-
	azaspiro-[4,5]-dec-2-en-3-yl]carbonylamino]-
	propionic acid,
15	(S)-2-[(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-methylphenyl]sulfonyl]amino-3-[[[8-(2-methylphenyl]sulfonyl]amino-3-[[[8-(2-methylphenyl]sulfonyl]amino-3-[[[8-(2-methylphenyl]sulfonyl]amino-3-[[[8-(2-methylphenyl]sulfonyl]amino-3-[[[8-(2-methylphenyl]sulfonyl]amino-3-[[[8-(2-methylphenyl]sulfonyl]amino-3-[[8-(2-methylphenyl]sulfonyl]amino-3-[[8-(2-methylphenyl]sulfonyl]amino-3-[[8-(2-methylphenyl]sulfonyl]amino-3-[[8-(2-methylphenyl]sulfonyl]amino-3-[[8-(2-methylphenyl]sulfonyl]amino-3-[8-(2-methylp
	<pre>pyridinylaminomethyl)-]-1-oxa-2-azaspiro-</pre>
	[4,5]-dec-2-en-3-yl]carbonylamino)propionic
	acid,
	(S)-2-[(2-chloro-4-methylphenyl)sulfonyl]amino-3-
20	[[[8-(2-pyridinylaminomethyl)-]-1-oxa-2-
	azaspiro-[4,5]-dec-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(4-biphenyl)sulfonyl]amino-3-[[[8-(2-
	pyridinylaminomethyl)-}-1-oxa-2-azaspiro-
25	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-[(2-bromophenyl)sulfonyl]amino-3-[[[8-(2-bromophenyl)sulfonyl]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl)sulfonyl]]amino-3-[[[8-(2-bromophenyl]sulfonyl]]amino-3-[[[8-(2-bromophenyl]sulfonyl]]amino-3-[[[8-(2-bromophenyl]sulfonyl]]amino-3-[[[8-(2-bromophenyl]sulfonyl]]amino-3-[[8-(2-bromophenyl]sulfonyl]]amino-3-[[8-(2-bromophenyl]sulfonyl]]amino-3-[[8-(2-bromophenyl]sulfonyl]]amino-3-[[8-(2-bromophenyl]sulfonyl]]amino-3-[[8-(2-bromophenyl]sulfonyl]]amino-3-[8-(2-bromophenyl]sulfonyl]sulfonyl]amino-3-[8-(2-bromophenyl]sulfonyl]sulfonyl]amino-3-[8-(2-bromophenyl]sulfony
	<pre>pyridinylaminomethyl)-]-1-oxa-2-azaspiro-</pre>
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
30	acid,
	(S)-2-[(2-naphthyl)sulfonyl]amino-3-[[[8-(2-
	<pre>pyridinylaminomethyl)-]-1-oxa-2-azaspiro-</pre>
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,

	(3)-2-[(1-hapheny1)suffony1]amino-3-[[[8-(2-
	pyridinylaminomethyl)-]-1-oxa-2-azaspiro-
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid.
5	(S)-2-phenylsulfonylamino-3-[[[8-(2-
	<pre>imidazolylaminomethyl)-]-1-oxa-2-azaspiro-</pre>
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-benzyloxycarbonylamino-3-[[[8-(2-
10	imidazolylaminomethyl)-]-1-oxa-2-azaspiro-
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-
	[[[8-(2-imidazolylaminomethyl)-]-1-oxa-2-
15	azaspiro-[4,5]-dec-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[[8-
	(2-imidazolylaminomethyl)-]-1-oxa-2-azaspiro
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
20	acid,
	(S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[[8-
	(2-imidazolylaminomethyl)-]-1-oxa-2-azaspiro
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,
25	(S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino
	3-[[[8-(2-imidazolylaminomethyl)-]-1-oxa-2-
	azaspiro-[4,5]-dec-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2-naphthyl)sulfonyl]amino-3-[[[8-(2-
30	<pre>imidazolylaminomethyl)-]-1-oxa-2-azaspiro-</pre>
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-[biphenylsulfonyl]amino-3-[[[8-(2-
	imidazolylaminomethyl)-1-1-oxa-2-azaspiro-

	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-phenylsulfonylamino-3-[[7-benzyloxycarbonyl-
	8-(2-imidazolylaminomethyl)-1-oxa-2,7-
5	diazaspiro-[4,4]-non-2-en-3-
	<pre>yl]carbonylamino]propionic acid,</pre>
	(S)-2-benzyloxycarbonylamino-3-[[7-
	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)-
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
10	yl]carbonylamino]propionic acid,
	(S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[7-instruction]]
	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)-
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
15	(S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)-
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[7-
20	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)-
•	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino-
	3-[[7-benzyloxycarbonyl-8-(2-
25	imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-
	[4,4]-non-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-[(2-naphthyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)-
30	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[biphenylsulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)-
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
35	vllcarbonylaminolpropionic acid

	(S)-2-phenylsulfonylamino-3-[[8-(2-
	imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-
	[4,4]-non-2-en-3-yl]carbonylamino]propionic acid,
5	(S)-2-benzyloxycarbonylamino-3-[[8-(2-
	imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-
	<pre>[4,4]-non-2-en-3-yl]carbonylamino]propionic acid,</pre>
	(S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[8
10	(2-imidazolylaminomethyl)-1-oxa-2,7-
	diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[8-(2,6-dimethylphenyl)sulfonyl]]
	imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-
15	[4,4]-non-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[8-(2
	imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-
	[4,4]-non-2-en-3-yl]carbonylamino]propionic
20	acid,
	(S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino
	3-[[8-(2-imidazolylaminomethyl)-1-oxa-2,7-
	diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
25	(S)-2-[(2-naphthy1)sulfony1]amino-3-[[8-(2-
	imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-
	<pre>[4,4]-non-2-en-3-yl)carbonylamino]propionic</pre>
	acid,
	(S)-2-[biphenylsulfonyl]amino-3-[[8-(2-
30	imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-
	[4,4]-non-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-phenylsulfonylamino-3-[[7-benzyloxycarbonyl-
	8-(2-pyridinylaminomethyl)-1-oxa-2,7-

```
diazaspiro-[4,4]-non-2-en-3-
                yl]carbonylamino]propionic acid,
           (S)-2-benzyloxycarbonylamino-3-[[7-
                benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-
  5
                1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
                yl]carbonylamino]propionic acid,
           (S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[7-
                benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-
                1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
10
                yl]carbonylamino]propionic acid,
          (S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[7-
               benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-
                1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid,
          (S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[7-
15
               benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-
               1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid,
          (S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino-
20
               3-[[7-benzyloxycarbonyl-8-(2-
               pyridinylaminomethyl)-1-oxa-2,7-diazaspiro-
               [4,4]-non-2-en-3-yl]carbonylamino]propionic
               acid,
          (S)-2-[(2-naphthy1)sulfony1]amino-3-[[7-
25
               benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-
               1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid,
          (S)-2-[biphenylsulfonyl]amino-3-[[7-
               benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-
30
               1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid,
          (S)-2-phenylsulfonylamino-3-[(7-benzyloxycarbonyl-
               8-(4,5-dihydroimidazol-2-yl)aminomethyl-1-oxa-
               2,7-diazaspiro-[4,4]-non-2-en-3-
35
               yl]carbonylamino]propionic acid,
```

	(S)-2-benzyloxycarbonylamino-3-[[7-
	benzyloxycarbonyl-8-(4,5-dihydroimidazol-2-
	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	<pre>2-en-3-yl]carbonylamino]propionic acid,</pre>
5	(S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(4,5-dihydroimidazol-2-
	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	2-en-3-yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[7-
10	benzyloxycarbonyl-8-(4,5-dihydroimidazol-2-
	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	<pre>2-en-3-yl]carbonylamino]propionic acid,</pre>
	(S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(4,5-dihydroimidazol-2-
15	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	2-en-3-yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino-
	3-[[7-benzyloxycarbonyl-8-(4,5-
	dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-
20	diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2-naphthyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(4,5-dihydroimidazol-2-
	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
25	<pre>2-en-3-yl]carbonylamino]propionic acid,</pre>
	(S)-2-[biphenylsulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-8-(4,5-dihydroimidazol-2-
	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	<pre>2-en-3-yl]carbonylamino]propionic acid,</pre>
30	(S)-2-phenylsulfonylamino-3-[[8-(4,5-
	dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-
	diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-benzyloxycarbonylamino-3-[[8-(4,5-
35	dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-

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diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid,
          (S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[8-
               (4,5-dihydroimidazol-2-yl)aminomethyl-1-oxa-
 5
               2,7-diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid,
          (S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[8-
               (4,5-dihydroimidazol-2-yl)aminomethyl-1-oxa-
               2,7-diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid,
10
          (S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[8-
               (4,5-dihydroimidazol-2-yl)aminomethyl-1-oxa-
               2,7-diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid,
15
          (S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino-
               3-[[8-(4,5-dihydroimidazol-2-yl)aminomethyl-1-
               oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
               vl]carbonylamino]propionic acid,
          (S)-2-[(2-naphthyl)sulfonyl]amino-3-[[8-(4,5-
20
               dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-
               diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid,
          (S)-2-[biphenylsulfonyl]amino-3-[[8-(4,5-
               dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-
25
               diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid, and
          (S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[8-
               (2-benzimidazolyl) aminomethyl-1-oxa-2,7-
               diazaspiro-[4,4]-non-2-en-3-
               yl]carbonylamino]propionic acid.
30
          In the present invention it has been discovered
    that the compounds of Formula I above are useful as
```

inhibitors of cell-matrix and cell-cell adhesion The present invention includes novel processes.

compounds of Formula I and methods for using such compounds for the prevention or treatment of diseases resulting from abnormal cell adhesion to the extracellular matrix which comprises administering to a host in need of such treatment a therapeutically effective amount of such compound of Formula I. In the present invention it has also been discovered that the compounds of Formula I above are useful as inhibitors of $\alpha_{\nu}\beta_{3}$. The compounds of the present invention inhibit the binding of vitronectin to $\alpha_{\nu}\beta_{3}$ and inhibit cell adhesion.

The present invention also provides pharmaceutical compositions comprising a compound of Formula I and a pharmaceutically acceptable carrier.

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15 The compounds of Formula I of the present invention are useful for the treatment (including prevention) of angiogenic disorders. The term "angiogenic disorders" as used herein includes conditions involving abnormal neovascularization, such 20 as tumor metastasis and ocular neovascularization, including, for example, diabetic retinopathy, neovascular glaucoma, age-related macular degeneration, and retinal vein occlusion, comprising administering to a mammal in need of such treatment a therapeutically effective amount of a compound of Formula I described above.

The compounds of Formula I of the present invention may be useful for the treatment or prevention of other diseases which involve cell adhesion processes, including, but not limited to, inflammation, bone degradation, thromboembolic disorders, restenosis, rheumatoid arthritis, asthma, allergies, adult respiratory distress syndrome, graft versus host disease, organ transplantation rejection, septic shock, psoriasis, eczema, contact dermatitis, osteoporosis,

osteoarthritis, atherosclerosis, inflammatory bowel disease and other autoimmune diseases. The compounds of Formula I of the present invention may also be useful for wound healing.

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The term "thromboembolic disorders" as used herein includes conditions involving platelet activation and aggregation, such as arterial or venous cardiovascular or cerebrovascular thromboembolic disorders, including, for example, thrombosis, unstable angina, first or recurrent myocardial infarction, ischemic sudden death, transient ischemic attack, stroke, atherosclerosis, venous thrombosis, deep vein thrombosis, thrombophlebitis, arterial embolism, coronary and cerebral arterial thrombosis, myocardial infarction, cerebral embolism, kidney embolisms, pulmonary embolisms, or such disorders associated with diabetes, comprising administering to a mammal in need of such treatment a therapeutically effective amount of a compound of Formula I described above.

20 The compounds of the present invention may be used for other ex vivo applications to prevent cellular adhesion in biological samples. The compounds of the present invention can also be administered in combination with one or more additional 25 therapeutic agents selected from: anti-coagulant or coagulation inhibitory agents, such as heparin or warfarin; anti-platelet or platelet inhibitory agents, such as aspirin, piroxicam, or ticlopidine; thrombin inhibitors such as boropeptides, hirudin or argatroban; 30 or thrombolytic or fibrinolytic agents, such as plasminogen activators, anistreplase, urokinase, or streptokinase.

The compounds of Formula I of the present invention can be administered in combination with one or more of the foregoing additional therapeutic agents.

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thereby to reduce the doses of each drug required to achieve the desired therapeutic effect. Thus, the combination treatment of the present invention permits the use of lower doses of each component, with reduced adverse, toxic effects of each component. A lower dosage minimizes the potential of side effects of the compounds, thereby providing an increased margin of safety relative to the margin of safety for each component when used as a single agent. Such combination therapies may be employed to achieve synergistic or additive therapeutic effects for the treatment of thromboembolic disorders.

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By "therapeutically effective amount" it is meant an amount of a compound of Formula I that when administered alone or in combination with an additional therapeutic agent to a cell or mammal is effective to prevent or ameliorate the thromboembolic disease condition or the progression of the disease.

By "administered in combination" it is meant that the compound of Formula I and one or more additional therapeutic agents are administered concurrently to the mammal being treated. When administered in combination each component may be administered at the same time or sequentially in any order at different points in time. Thus, each component may be administered separately but sufficiently closely in time so as to provide the desired therapeutic effect.

The term anti-coagulant agents (or coagulation inhibitory agents), as used herein, denotes agents that inhibit blood coagulation. Such agents include warfarin (available as COUMADIN®) and heparin. The term anti-platelet agents (or platelet inhibitory agents), as used herein, denotes agents that inhibit platelet function such as by inhibiting the aggregation, adhesion or granular secretion of platelets. Such 35

agents include the various known non-steroidal antiinflammatory drugs such as aspirin, ibuprofen, naproxen, sulindac, indomethacin, mefenamate, droxicam, diclofenac, sulfinpyrazone, and piroxicam, including pharmaceutically acceptable salts or prodrugs thereof. Other suitable anti-platelet agents include ticlopidine, including pharmaceutically acceptable salts or prodrugs thereof. Ticlopidine is also a preferred compound since it is known to be gentle on the gastro-intestinal tract in use. Still other suitable platelet inhibitory agents 10 include thromboxane-A2-receptor antagonists and thromboxane-A2-synthetase inhibitors, as well as pharmaceutically acceptable salts or prodrugs thereof. The phrase thrombin inhibitors (or anti-thrombin 15 agents), as used herein, denotes inhibitors of the serine protease thrombin. By inhibiting thrombin, various thrombin-mediated processes, such as thrombin-mediated platelet activation (that is, for example, the aggregation of platelets, and/or the granular secretion of plasminogen activator inhibitor-1 20 and/or serotonin) and/or fibrin formation are disrupted. Such inhibitors include boroarginine derivatives and boropeptides, hirudin and argatroban, including pharmaceutically acceptable salts and prodrugs thereof. Boroarginine derivatives and boropeptides include 25 N-acetyl and peptide derivatives of boronic acid, such as C-terminal α -aminoboronic acid derivatives of lysine, ornithine, arginine, homoarginine and corresponding isothiouronium analogs thereof. The term hirudin, as 30 used herein, includes suitable derivatives or analogs of hirudin, referred to herein as hirulogs, such as disulfatohirudin. Boropeptide thrombin inhibitors include compounds described in Kettner et al., U.S. Patent No. 5,187,157 and European Patent Application Publication Number 293 881 A2, the disclosures of which 35

are hereby incorporated herein by reference. Other suitable boroarginine derivatives and boropeptide thrombin inhibitors include those disclosed in PCT Application Publication Number 92/07869 and European Patent Application Publication Number 471 651 A2, the disclosures of which are hereby incorporated herein by reference, in their entirety.

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The phrase thrombolytics (or fibrinolytic) agents (or thrombolytics or fibrinolytics), as used herein, denotes agents that lyse blood clots (thrombi). 10 Such agents include tissue plasminogen activator, anistreplase, urokinase or streptokinase, including pharmaceutically acceptable salts or prodrugs thereof. Tissue plasminogen activator (tPA) is commercially available from Genentech Inc., South San Francisco, 15 California. The term anistreplase, as used herein, refers to anisoylated plasminogen streptokinase activator complex, as described, for example, in European Patent Application No. 028,489, the disclosures of which are hereby incorporated herein by reference 20 herein, in their entirety. The term urokinase, as used herein, is intended to denote both dual and single chain urokinase, the latter also being referred to herein as prourokinase.

Administration of the compounds of Formula I of the invention in combination with such additional therapeutic agent, may afford an efficacy advantage over the compounds and agents alone, and may do so while permitting the use of lower doses of each. A lower dosage minimizes the potential of side effects, thereby providing an increased margin of safety.

The compounds of the present invention are also useful as standard or reference compounds, for example as a quality standard or control, in tests or assays involving the binding of vitronectin or fibrinogen to

 $\alpha_V \beta_3$. Such compounds may be provided in a commercial kit, for example, for use in pharmaceutical research involving $\alpha_V \beta_3$. The compounds of the present invention may also be used in diagnostic assays involving $\alpha_V \beta_3$.

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The compounds herein described may have asymmetric centers. Unless otherwise indicated, all chiral, diastereomeric and racemic forms are included in the present invention. Many geometric isomers of olefins, C=N double bonds, and the like can also be present in the compounds described herein, and all such stable isomers are contemplated in the present invention. It will be appreciated that compounds of the present invention that contain asymmetrically substituted carbon atoms may be isolated in optically active or racemic forms. It is well known in the art how to prepare optically active forms, such as by resolution of racemic forms or by synthesis, from optically active starting materials. All chiral, diastereomeric, racemic forms and all geometric isomeric forms of a structure are intended, unless the specific stereochemistry or isomer form is specifically indicated.

When any variable (for example but not limited to, R^2 , R^4 , R^6 , R^7 , R^8 , R^{12} , and R^{14} , n, etc.) occurs more than one time in any constituent or in any formula, its definition on each occurrence is independent of its definition at every other occurrence. Thus, for example, if a group is shown to be substituted with 0-2 R^4 , then said group may optionally be substituted with up to two R^4 and R^4 at each occurrence is selected independently from the defined list of possible R^4 . Also, by way of example, for the group $-N(R^{5a})_2$, each of the two R^{5a} substituents on N is independently selected from the defined list of possible R^{5a} . Similarly, by way of example, for the group $-C(R^7)_2$ -, each of the two

 \mathbb{R}^7 substituents on C is independently selected from the defined list of possible \mathbb{R}^7 .

When a bond to a substituent is shown to cross the bond connecting two atoms in a ring, then such substituent may be bonded to any atom on the ring. When a bond joining a substituent to another group is not specifically shown or the atom in such other group to which the bond joins is not specifically shown, then such substituent may form a bond with any atom on such other group.

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When a substituent is listed without indicating the atom via which such substituent is bonded to the rest of the compound of Formula I, then such substituent may be bonded via any atom in such substituent. For example, when the substituent is piperazinyl, piperidinyl, or tetrazolyl, unless specified otherwise, said piperazinyl, piperidinyl, tetrazolyl group may be bonded to the rest of the compound of Formula I via any atom in such piperazinyl, piperidinyl, tetrazolyl group.

Combinations of substituents and/or variables are permissible only if such combinations result in stable compounds. By stable compound or stable structure it is meant herein a compound that is sufficiently robust to survive isolation to a useful degree of purity from a reaction mixture, and formulation into an efficacious therapeutic agent.

The term "substituted", as used herein, means that any one or more hydrogen on the designated atom is replaced with a selection from the indicated group, provided that the designated atom's normal valency is not exceeded, and that the substitution results in a stable compound. When a substitution is keto (i.e., =0), then 2 hydrogens on the atom are replaced.

As used herein, "alkyl" is intended to include both branched and straight-chain saturated aliphatic

hydrocarbon groups having the specified number of carbon atoms (for example, "Co-C10" denotes alkyl having 0 to 10 carbon atoms; thus, Co denotes a direct bond between the groups linked by the Co group); "haloalkyl" is intended to include both branched and straight-chain saturated 5 aliphatic hydrocarbon groups having the specified number of carbon atoms, substituted with 1 or more halogen (for example $-C_vF_w$ where v = 1 to 3 and w = 1 to (2v+1); "alkoxy" represents an alkyl group of indicated number of carbon atoms attached through an oxygen bridge; 10 "cycloalkyl" is intended to include saturated ring groups, including mono-, bi- or poly-cyclic ring systems, such as cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, and adamantyl; and 15 "biycloalkyl" is intended to include saturated bicyclic ring groups such as [3.3.0]bicyclooctane, [4.3.0] bicyclononane, [4.4.0] bicyclodecane (decalin), ' [2.2.2] bicyclooctane, and so forth. "Alkenyl" is intended to include hydrocarbon chains of either a 20 straight or branched configuration and one or more unsaturated carbon-carbon bonds which may occur in any stable point along the chain, such as ethenyl, propenyl and the like; and "alkynyl" is intended to include hydrocarbon chains of either a straight or branched 25 configuration and one or more triple carbon-carbon bonds which may occur in any stable point along the chain, such as ethynyl, propynyl and the like. The terms "alkylene", "alkenylene", "phenylene", and the like, refer to alkyl, alkenyl, and phenyl 30 groups, respectively, which are connected by two bonds to the rest of the structure of Formula I. Such "alkylene", "alkenylene", "phenylene", and the like, may alternatively and equivalently be denoted herein as "-(alkyl)-", "-(alkyenyl)-" and "-(phenyl)-", and the

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like.

"Halo" or "halogen" as used herein refers to fluoro, chloro, bromo and iodo; and "counterion" is used to represent a small, negatively charged species such as chloride, bromide, hydroxide, acetate, sulfate and the like.

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As used herein, "aryl" or "aromatic residue" is intended to mean phenyl or naphthyl; the term "arylalkyl" represents an aryl group attached through an alkyl bridge.

10 As used herein, "carbocycle" or "carbocyclic residue" is intended to mean any stable 3- to 7- membered monocyclic or bicyclic or 7- to 14-membered bicyclic or tricyclic or an up to 26-membered polycyclic carbon ring, any of which may be saturated, partially unsaturated, or aromatic. Examples of such carbocyles include, but are not limited to, cyclopropyl, cyclopentyl, cyclohexyl, phenyl, biphenyl, naphthyl, indanyl, adamantyl, or tetrahydronaphthyl (tetralin).

As used herein, the term "heterocycle" or 20 "heterocyclic" is intended to mean a stable 5- to 7membered monocyclic or bicyclic or 7- to 10-membered bicyclic heterocyclic ring which may be saturated, partially unsaturated, or aromatic, and which consists of carbon atoms and from 1 to 4 heteroatoms 25 independently selected from the group consisting of N, O and S and wherein the nitrogen and sulfur heteroatoms may optionally be oxidized, and the nitrogen may optionally be quaternized, and including any bicyclic group in which any of the above-defined heterocyclic 30 rings is fused to a benzene ring. The heterocyclic ring may be attached to its pendant group at any heteroatom or carbon atom which results in a stable structure. heterocyclic rings described herein may be substituted on carbon or on a nitrogen atom if the resulting 35 compound is stable. Examples of such heterocycles

include, but are not limited to, pyridyl (pyridinyl), pyrimidinyl, furanyl (furyl), thiazolyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, tetrazolyl, benzofuranyl, benzothiophenyl, indolyl, indolenyl,

- isoxazolinyl, isoxazolyl, quinolinyl, isoquinolinyl, benzimidazolyl, piperidinyl, 4-piperidonyl, pyrrolidinyl, 2-pyrrolidonyl, pyrrolinyl, tetrahydrofuranyl, tetrahydroquinolinyl, tetrahydroisoquinolinyl, decahydroquinolinyl or
- octahydroisoquinolinyl, azocinyl, triazinyl, 6H-1,2,5-10 thiadiazinyl, 2H,6H-1,5,2-dithiazinyl, thianthrenyl, pyranyl, isobenzofuranyl, chromenyl, xanthenyl, phenoxathiinyl, 2H-pyrrolyl, pyrrolyl, imidazolyl, pyrazolyl, isothiazolyl, isoxazolinyl, isoxazolyl,
- oxazolyl, pyridinyl, pyrazinyl, pyrimidinyl, 15 pyridazinyl, indolizinyl, isoindolyl, 3H-indolyl, indolyl, 1H-indazolyl, purinyl, 4H-quinolizinyl, isoquinolinyl, quinolinyl, phthalazinyl, naphthyridinyl, quinoxalinyl, quinazolinyl, cinnolinyl, pteridinyl,
- 4aH-carbazole, carbazole, ß-carbolinyl, phenanthridinyl, 20 acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, phenarsazinyl, phenothiazinyl, furazanyl, phenoxazinyl, isochromanyl, chromanyl, pyrrolidinyl, pyrrolinyl, imidazolidinyl, imidazolinyl, pyrazolidinyl,
- pyrazolinyl, piperidinyl, piperazinyl, indolinyl, 25 isoindolinyl, quinuclidinyl, morpholinyl or oxazolidinyl. Also included are fused ring and spiro compounds containing, for example, the above heterocycles.
- 30 As used herein, the term "heteroaryl" refers to aromatic heterocyclic groups. Such heteroaryl groups are preferably 5-6 membered monocyclic groups or 8-10 membered fused bicyclic groups. Examples of such heteroaryl groups include, but are not limited to
- 35 pyridyl (pyridinyl), pyrimidinyl, furanyl (furyl),

thiazolyl, thienyl, pyrrolyl, pyrazolyl, imidazolyl, indolyl, isoxazolyl, oxazolyl, pyrazinyl, pyrimidinyl, pyridazinyl, benzofuranyl, benzothienyl, benzimidazolyl, quinolinyl, or isoquinolinyl.

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As used herein, "prodrugs" refer to any covalently bonded carriers which release the active parent drug according to Formula I in vivo when such prodrug is administered to a mammalian subject. Prodrugs of the compounds of Formula I are prepared by modifying functional groups present in the compounds in such a way that the modifications are cleaved, either in routine manipulation or in vivo, to the parent compounds. Prodrugs include compounds of Formula I wherein hydroxyl, amino, sulfhydryl, or carboxyl groups are bonded to any group that, when administered to a mammalian subject, cleaves to form a free hydroxyl, amino, sulfhydryl, or carboxyl group respectively. Examples of prodrugs include, but are not limited to, acetate, formate and benzoate derivatives of alcohol and amine functional groups in the compounds of Formula I, and the like.

As used herein, "pharmaceutically acceptable salts" refer to derivatives of the disclosed compounds wherein the parent compound of Formula I is modified by making acid or base salts of the compound of Formula I. Examples of pharmaceutically acceptable salts include, but are not limited to, mineral or organic acid salts of basic residues such as amines; alkali or organic salts of acidic residues such as carboxylic acids; and the like.

The pharmaceutically acceptable salts of the compounds of Formula I include the conventional non-toxic salts or the quaternary ammonium salts of the compounds of Formula I formed, for example, from non-

toxic inorganic or organic acids. For example, such conventional non-toxic salts include those derived from inorganic acids such as hydrochloric, hydrobromic, sulfuric, sulfamic, phosphoric, nitric and the like; and the salts prepared from organic acids such as acetic, propionic, succinic, glycolic, stearic, lactic, malic, tartaric, citric, ascorbic, pamoic, maleic, hydroxymaleic, phenylacetic, glutamic, benzoic, salicylic, sulfanilic, 2-acetoxybenzoic, fumaric, toluenesulfonic, methanesulfonic, ethane disulfonic, oxalic, isethionic, and the like.

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The pharmaceutically acceptable salts of the present invention can be synthesized from the compounds of Formula I which contain a basic or acidic moiety by conventional chemical methods. Generally, the salts are prepared by reacting the free base or acid with stoichiometric amounts or with an excess of the desired salt-forming inorganic or organic acid or base in a suitable solvent or various combinations of solvents.

The pharmaceutically acceptable salts of the acids of Formula I with an appropriate amount of a base, such as an alkali or alkaline earth metal hydroxide e.g. sodium, potassium, lithium, calcium, or magnesium, or an organic base such as an amine, e.g.,

dibenzylethylenediamine, trimethylamine, piperidine, pyrrolidine, benzylamine and the like, or a quaternary ammonium hydroxide such as tetramethylammonium hydroxide and the like.

As discussed above, pharmaceutically acceptable

30 salts of the compounds of the invention can be prepared
by reacting the free acid or base forms of these
compounds with a stoichiometric amount of the
appropriate base or acid, respectively, in water or in
an organic solvent, or in a mixture of the two;

35 generally, nonaqueous media like ether, ethyl acetate,

ethanol, isopropanol, or acetonitrile are preferred. Lists of suitable salts are found in *Remington's Pharmaceutical Sciences*, 17th ed., Mack Publishing Company, Easton, PA, 1985, p. 1418, the disclosure of which is hereby incorporated by reference.

The disclosures of all of the references cited herein are hereby incorporated herein by reference in their entirety.

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<u>Synthesis</u>

The compounds of the present invention can be prepared in a number of ways well known to one skilled in the art of organic synthesis. The compounds of the present invention can be synthesized using the methods described below, together with synthetic methods known in the art of synthetic organic chemistry, or variations thereon as appreciated by those skilled in the art. Preferred methods include, but are not limited to, those described below. All references cited herein are hereby incorporated in their entirety herein by reference.

25 isoxazoline ring as one ring of the spirocycle can be conveniently prepared by dipolar cycloaddition of nitrile oxides with appropriate dipolarophiles (for reviews of 1,3-dipolar cycloaddition chemistry, see 1,3-Dipolar Cycloaddition Chemistry (Padwa, ed.), Wiley, New York, 1984; Kanemasa and Tsuge, Heterocycles 1990, 30, 719). The requisite nitrile oxides are in turn prepared from commercially available precursors or appropriately substituted aldehydes via the intermediate oximes.

Scheme 1 illustrates one synthetic sequence which will provide compounds of Formula I of this invention.

Scheme 1

Swern Oxidation
$$CO_2Et$$

$$CH_2Cl_2$$

$$HO$$

$$CO_2Et$$

$$CH_2Cl_2$$

$$HO$$

$$CO_2Et$$

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Treatment of a methylenecycloalkylmethanol with ethyl chlorooximidoacetate in a suitable solvent, such as tetrahydrofuran or dichloromethane, in the presence of a mild base, such as sodium bicarbonate or

triethylamine, provides a spirocycle intermediate, 1(a). Alternately, the cycloaddition can be carried out by thermal decomposition of diethyl nitromalonate in refluxing mesitylene by the method of Shimizu et al. (Bull Chem. Soc. Jpn., 1985, <u>58</u>, 2519-2522). hydroxyl group in 1(a) can be subsequently oxidized to the corresponding aldehyde by any of a number of known methods for carrying out this transformation, i.e., (See Manacuso & Swern, Synthesis, 1981, 165; Tidwell. Synthesis, 1990, 857; D.B. Dess & J.C. Martin, J. Org. 10 Chem., 1983, 48, 4155; op cit. J. Amer. Chem. Soc., 1991, 72, 77; R.E. Ireland & L. Liu, J. Org. Chem, 1993, 58, 2899). Reductive amination of the resulting aldehyde with an appropriate aminoheterocycle, such as 15 2-aminopyridine, can be achieved using sodium triacetoxyborohydride (Abdel-Magid, A. F.; Maryanoff, C. A. Synlett, 1990, 2, 537) to provide a secondary amine. Optional protection of the nitrogen as its BOC derivative yields 1(c). Subsequent hydrolysis of the ethyl ester using conventional methods known to one 20 skilled in the art of organic synthesis gives the corresponding acid 1(d). Coupling of compound 1(d) to an appropriately substituted α - or β -amino ester, 1(e) affords compounds of formula 1(f).

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The coupling is carried out using any of the many methods for the formation of amide bonds known to one skilled in the art of organic synthesis. These methods include but are not limited to conversion of the acid to the corresponding acid chloride or fluoride, or use of standard coupling procedures such as the azide method, mixed carbonic acid anhydride (isobutyl chloroformate) method, carbodiimide (dicyclohexylcarbodiimide, diisopropylcarbodiimide, or water-soluble carbodiimides) method, active ester (p-nitrophenyl ester, N-

hydroxysuccinic imido ester) method, carbonyldiimidazole method, or coupling with phosphorus reagents such as BOP-Cl. Some of these methods (especially the carbodiimide) can be enhanced by the addition of 1-hydroxybenzotriazole. Deprotection of compound 1(f) is carried out using standard methods of removal of carboxy and amino protecting groups to provide target compounds of formula 1(g).

Additional compounds of formula I can be prepared 10 as shown in Scheme 2. Cycloaddition product, 1(a) can be converted to the corresponding amino compound by conversion to azide 2(a) using diphenylphosphoryl azide under Mitsunobu conditions (Mitsunobu, O. Synthesis 1981, 1) and reduction of the resulting azide with 15 triphenylphosphine (Staudinger, H.; Meyer, J. Helv. Chim. Acta. 1919, 2, 635) Protection of the resulting amino group as its BOC derivative provides intermediate 2(b). Alternately, the amine function can be introduced 20 prior to cycloaddition by conversion of the starting methylenecycloalkylmethanol to the corresponding tosylate, displacement of the tosyl group with sodium azide, reduction to the amine and treatment with di-tbutyldicarbonate. Subsequent 1,3 dipolarcycloaddition provides 2(a). Ester hydrolysis and amide coupling as 25 described above provides compounds of formula 2(d). Hydrolysis of the ester, removal of the BOC protecting group and treatment of the free amine with an appropriate heterocyclic isothiouronium salt, such as those listed in the scheme, provides compounds of 30 Formula 2(f).

Scheme 2

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Compounds of Formula I, wherein \mathbb{R}^1 is a 7-azabenzimidazol-2-yl, group can also be prepared from cycloaddition product $\mathbf{1}(\mathbf{a})$ as depicted in Scheme 3.

Jones oxidation of the primary hydroxyl group provides acid 3(a) which is condensed with 2,3-diaminopyridine to provide the 7-azabenzimidazole derivative, 3(b). This intermediate is converted to compounds of the invention by the steps of ester hydrolysis, coupling to compounds of formula 1(e) and deprotection described in detail above.

Scheme 3

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The appropriately substituted racemic β-amino acids may be purchased commercially or, as is shown in Scheme 4, Method 1, prepared from the appropriate aldehyde, malonic acid and ammonium acetate according to the procedure of Johnson and Livak (J. Am. Chem. Soc. 1936, 58, 299). Racemic β -substituted- β -amino esters may be prepared through the reaction of dialkylcuprates or alkyllithiums with 4-benzoyloxy-2-azetidinone followed by treatment with anhydrous ethanol (Scheme 4, Method 2) 10 or by reductive amination of β -keto esters as is described in WO9316038. (Also see Rico et al., J. Org. Chem. 1993, 58, 7948-51.) Enantiomerically pure β substituted- β -amino acids can be obtained through the 15 optical resolution of the racemic mixture or can be prepared using numerous methods, including: Arndt-Eistert homologation of the corresponding α -amino acids as shown in Scheme 4, Method 3 (see Meier, and Zeller, Angew, Chem. Int. Ed. Engl. 1975, 14, 32; Rodriguez, et 20 al. Tetrahedron Lett. 1990, 31, 5153; Greenlee, J. Med. Chem. 1985, 28, 434 and references cited within); and through an enantioselective hydrogenation of a dehydroamino acid as is shown in Scheme 4, Method 4 (see Asymmetric Synthesis, Vol. 5, (Morrison, ed.) Academic Press, New York, 1985). A comprehensive treatise on the 25 preparation of β-amino acid derivatives may be found in patent application WO 93/07867, the disclosure of which is hereby incorporated by reference.

Scheme 4

Method 1

Method 2

Method 3

Method 4

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The synthesis of N²-substituted diaminopropionic acid derivatives can be carried out via Hoffman rearrangement of a wide variety of asparagine derivatives as described in Synthesis, 266-267, (1981) or by manipulation of the commercially available 3-amino-2-benzyloxycarbonylaminopropionic acid.

Additional dipolarophiles useful for the preparation of the compounds of this invention are either commercially available or may be prepared by numerous methods. Synthesis of representative examples and their conversion into compounds of Formula I are illustrated in the following schemes.

Heating a neat mixture of 8-aza-1,4-20 dioxaspiro(4,5)decane and 2,6-dibromopyridine provides

bromopyridine intermediate 5(a) as shown in Scheme 5. Hydrolysis of the acetal protecting group gives the ketone, 5(b) which can then undergo olefination to compound 5(c). The olefination can be carried out by a number of methods known to one skilled in the art. (For suitable olefination methods, see S. H. Pine et al., Synthesis 1991, 165; Bull. Chem Soc. Jpn., 1980, 53, 1698; or J. Org. Chem. 1968, 33, 780.) The alkene is then subjected to the 1,3-dipolar cycloaddition 10 conditions described above to provide the spirocyclic system, 5(d). Amination with potassium amide in liquid ammonia followed by protection of the resulting amine as its BOC derivative gives compound 5(e). This intermediate is then carried on to compounds of Formula **5(g)** using the steps previously described. 15

Scheme 5

5 Preparation of the analogous (4,4) spiro system is outlined in Scheme 6. Hydrogenation of commercially

available 1-benzyl-3-hydroxypyrolidine and selective reprotection of the amine as the t-butylcarbamate provides 6(a). Oxidation of the hydroxyl to the ketone 6(b) by Swern oxidation or other standard methods followed by olefination as described above provides alkene 6(c). This alkene is then subjected to 1,3-dipolar cycloaddition as previously described to provide the spirocycle 6(d). Ester hydrolysis and coupling to a suitable β-amino ester gives 6(e). Removal of the BOC protecting group and treament with 2-bromo-6-t-butoxycarbonylaminopyridine (Aust. J. Chem. 1982, 35, 2025) gives intermediate 6(f). Finally, deprotection provides compounds of this invention of Formula 6(g).

Scheme 6

A further class of spirocycles useful in the present invention is prepared as outlined in Scheme 7. Reduction of N-Cbz 4-hydroxyproline with borane-dimethyl sulfide complex in tetrahydrofuran provides diol 7(a). The primary hydroxyl is then selectively protected as its t-butyldimethylsilyl ether, 7(b). Oxidation of the remaining secondary alcohol using methods described above provides ketone 7(c) which can be converted to alkene 7(d) by olefination. Compound 7(d) then 10 undergoes 1,3-dipolarcycloaddition to provide spirocycle 7(e). Deprotection of the silyl ether by treatment with fluoride ion followed by Swern oxidation of the resulting alcohol provides aldehyde 7(f). Reductive amination with 2-aminopyridine followed by Boc 15 protection of the resulting secondary amine yields 7(g). Ester hydrolysis, coupling to the desired 2,3diaminopropionate derivative and deprotection gives 7(h). Alternately prior to deprotection the Cbz group can be selectively removed and alternate R¹⁰ groups 20 introduced using standard methods known to one skilled in the art to provide compounds 7(i).

Scheme 7

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7(h)

Compounds of Formula I wherein Q includes a 1,2,4oxadiazoline as one ring of the spriocycle are prepared
as shown in Scheme 8. Protection of 4methylenecyclohexylmethanol as its t-butyldimethylsilyl
ether followed by ozonolysis of the double bond provides
ketone 8(a). Treatment of compound 8(a) with a
suitable amine provides an imine 8(b) which can undergo
1,3-dipolarcycloaddition with a nitrile oxide to provide
spirocycle 8(c). Further elaboration as described above
would provide additional compounds of the present
invention of Formula 8(h).

Scheme 8

Additional spirocyclic compounds useful in the present invention can be prepared as outlined in Scheme 9 wherein 1,3-dipolarcycloaddition is carried using ethyl diazoacetate (E. Keller et al., Tetrahedron, 1993, 49, 8899) to provide spirocycle 9(b) ($R^{10} = H$). The nitrogen of the resulting pyrazole ring may be optionally functionalized using standard methodology prior to carrying out the remaining steps leading to compounds of formula 9(g).

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Scheme 9

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Fully saturated spirocycles are obtained by 1,3-dipolarcycloadditon of α-methoxycarbonylnitrones to an appropriately substituted alkene as illustrated in Scheme 10. (Y. Inouye et al., Bull Chem. Soc. Jpn, 1979, 52, 3763; J. Hara et al., ibid., 1981, 54, 3871).

Scheme 10

$$\begin{array}{c|c}
& CO_2Et \\
& N \\
& N$$

The detailed processes for preparing the compounds of Formula I are illustrated by the following Examples. It is, however, understood that this invention is not

PCT/US97/04567 WO 97/33887

limited to the specific details of these examples. Melting points (mp) are uncorrected. Proton nuclear magnetic resonance spectra (NMR) were measured in chloroform-d (CDCl₃) unless otherwise specified and the peaks are reported in parts per million (ppm) downfield from tetramethylsilane (TMS). The coupling patterns are reported as follows: s, singlet; d, doublet; t, triplet; q, quartet; m, multiplet; bs, broad singlet; bm, broad multiplet. Infrared spectra are reported in reciprocal centimeters (cm⁻¹). All final compounds gave 10 satisfactory nmr and HRMS data and were analyzed to be >98% pure by reverse phase analytical HPLC.

Examples

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Example 1081

(S)-2-benzyloxycarbonylamino-3-[[8-(2pyridinylamino)methyl-1-oxa-2-azaspiro-[4.5]-dec-2-en-3vllcarbonvlaminolpropionic acid

Ethyl [(8-hydroxymethyl)-1-oxa-2-azaspiro-[4,5]-dec-2en-3-vllcarboxvlate: 1(a)

Method A: 4-Methylenecyclohexylmethanol (2.52g, 20mmol, Wiley Organics, 63% purity) and sodium bicarbonate 25 (8.4g, 100mmol) in 45ml of 2:1 THF: H_20 was cooled in an ice bath. Ethyl chlorooximidoacetate (5.00g, 33mmol) in 30ml 2:1 THF: H_20 was then added, and the mixture stirred at room temperature for 18 hours. The mixture was then diluted with ethyl acetate and washed with water. The aqueous layer was extracted with one more portion of ethyl acetate. The organic layers were combined, dried $(MgSO_4)$, filtered, concentrated and the residue purified by flash chromatography (silica gel column/1:1 EtOAc: Hexane) to afford 1(a) as a colorless oil (57.6%

yield). HRMS calcd. for $C_{12}H_{19}NO_4$ ([M+H]+): 242.139233; found: 242.140376.

Method B: A mixture of 4-Methylenecyclohexylmethanol (10g, mol, Wiley Organics, 63% purity, 0.051 mol) and diethylnitromalonate (14 ml, 0.08 mol) in 100 ml mesitylene was refluxed for 4-5 hrs under a nitrogen atmosphere with stirring. The resulting yellow solution was evaporated on a rotary evaporator in vacuo and the residue purified by flash chromatography (silica gel/70:30 Heyape/ethyl acetate) to provide 6.4 g of 1(2)

10 gel/70:30 Hexane/ethyl acetate) to provide 6.4 g of 1(a) (52%) as 3/2 mixture of diastereomers by nmr.

Ethyl [(8-formyl)-1-oxa-2-azaspiro-[4.5]-dec-2-en-3-yllcarboxylate: 1(b): Oxalyl chloride (0.70ml, 8mmol)

in 5ml CH₂Cl₂ was cooled to -78°C in dry ice-acetone bath and treated with dimethylsulfoxide (0.74ml, 10.4mmol) in 10ml CH₂Cl₂ and stirred at -78°C for 15 minutes.

Intermediate 1(a) (992mg, 4mmol) in 10ml CH₂Cl₂ was then

added, and the mixture stirred at -78°C for 1 hour.

- 20 Triethylamine (2.0g, 20mmol) in 5 ml CH₂Cl₂ was then added, and the mixture stirred at -78°C for 15 minutes. The bath was removed and the mixture allowed to warm up over a 30 minute period, diluted with CH₂Cl₂ (50ml) and washed with water followed by brine. The organic layer was separated, dried over anhydrous magnesium sulfate,
 - filtered and concentrated to afford 0.68g of 1(b) as a clear oil. HRMS calcd. for $C_{12}H_{17}NO_4$ ([M+H]+): 240.123583; found: 240.123665.
- 50 Ethyl [8-[(N-t-butoxycarbonyl)-(N-2pyridinyl)aminomethyll-1-oxa-2-azaspiro-[4,5]-dec-2-en3-yllcarboxylate 1(c): The intermediate 1(b) (1.068g, 4
 mmol crude) and acetic acid (240mg, 4mmol) in 15ml 1,2dichloroethane were treated with sodium
- 35 triacetoxyborohydride (1.19g, 5.6mmol), and the mixture

stirred at room temperature for 18 hours. The mixture was diluted with ethyl acetate and washed with sat. sodium bicarbonate and then brine. The organic layer was separated, dried over anhydrous magnesium sulfate,

- filtered and concentrated to afford 1.32g of amine as an oil. HRMS calcd. for $C_{17}H_{23}N_3O_3$ ([M+H]+): 318.181767; found: 318.183254.
 - The crude amine and triethylamine (1.0g, 10mmol) in 20ml dichloromethane were treated with di-t-butyldicarbonate
- 10 (2.18g, 10mmol), and stirred at room temperature for 18 hours. The mixture was diluted with dichloromethane and washed with water and brine. The organic layer was separated, dried over anhydrous magnesium sulfate, filtered, concentrated and the residue purified by flash
- chromatography (silica gel/1:3 EtOAc:Hexane) to afford 845mg of 1(c) as a colorless oil (50.6% yield from 1(a)). HRMS calcd. for C₂₂H₃₁N₃O₅ ([M+H]+): 418.234197; found: 418.233666.
- 20 [8-[(N-t-Butoxycarbonyl)-(N-2-pyridinyl)aminomethyl]-1-oxa-2-azaspiro-[4.5]-dec-2-en-3-yllcarboxylic acid 1(d):
 The intermediate 1(c) (209mg, 0.5mmol) in 4.5ml of 2:1
 THF:H₂O was treated with lithium hydroxide monohydrate
 (25mg, 0.6mmol) and the mixture stirred at room
 temperature for 18 hours. The mixture was quenched with 0.6ml of 1 N HCl and extracted with ethyl acetate
- 0.6ml of 1 N HCl and extracted with ethyl acetate (2x25ml). The organic layer was separated, dried over anhydrous magnesium sulfate, filtered, concentrated to afford 199mg of 1(d) as a colorless foam. HRMS calcd.

 30 for C20H27N3O5 ([M+H]+): 390.202896; found: 390.202306.
 - Methyl (S)-2-benzyloxycarbonylamino-3-[[8-[N-(t-butoxycarbonyl)-N-(2-pyridinyl)aminolmethyl-1-oxa-2-azaspiro-[4.5]-dec-2-en-3-yllcarbonylaminolpropionate
- 35 1(f) (R¹⁵ = NHCbz, R = Me): The intermediate 1(d)

(199mg, 0.5mmol crude), 1(e) (R¹⁵ = NHCbz, R = Me,
144mg, 0.5mmol) and BOP Reagent (265 mg, 0.6 mmol) in
3ml DMF were treated with 4-N-methylmorpholine (152 mg,
1.5 mmol) in 2ml DMF and the mixture stirred at room
temperature for 18 hours. The mixture was diluted with
ethyl acetate and washed with sat. sodium bicarbonate,
water and then brine. The organic layer was separated,
dried over anhydrous magnesium sulfate, filtered,
concentrated and the residue purified by flash
chromatography (silica gel column/1:1 EtOAc:Hexane
followed by 10:1:10 EtOAc:EtOH:Hexane) to afford 213mg
of 1(f) (R¹⁵ = NHCbz, R = Me) as a white solid (68.3%
yield from 1(c)). HRMS calcd. for C₃₂H₄₁N₅O₈ ([M+H]+):
624.303339; found: 624.303031.

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(S)-2-benzyloxycarbonylamino-3-[[8-(2pyridinylamino)methyl-1-oxa-2-azaspiro-[4,5]-dec-2-en-3-<u>yllcarbonylaminolpropionic acid</u> 1(g) ($R^{15} = NHCbz$): The intermediate 1(f) (205mg, 0.33mmol crude) in 4ml of 1:1 MeOH:H2O was treated with lithium hydroxide monohydrate 20 (21mg, 0.5mmol) and the mixture stirred at room temperature for 18 hours. The mixture was neutralised with 0.5ml of 1 N HCl and extracted with EtOAc. The organic layer was separated, dried over anhydrous 25 magnesium sulfate, filtered, concentrated to afford 205mg of the free acid as a white solid. HRMS calcd. for $C_{31}H_{39}N_5O_8$ ([M+H]+): 610.287689; found: 610.290115. Crude acid was treated with 3ml of 4M HCl in dioxane and stirred at room temperature for 18 hours. The mixture 30 was concentrated in vacuo and the residue purified by preparative HPLC (C18/80% CH3CN:20% H2O:0.05% TFA) to afford 132mg of a white solid. The compound was lyophilyzed from 2ml of 1:1 CH₃CN:H₂O to afford 107mg of 1(g) (R¹⁵ = NHCbz) as a white solid (52.0% yield from 35 1(f)). 1H NMR (DMSO-D6; Mixture of diastereoisomers) d

7.8 (m, 2H), 7.35 (bs, 5H), 6.8 (m, 2H), 5.11 (s, 2H), 4.44 (s, 1H), 3.4 (bm, 2H), 3.2 (m, 2H), 2.8 (s, 2H), 2.0 - 1.2 (bm, 8H); HRMS calcd. for $C_{26}H_{31}N_5O_6$ ([M+H]+): 510.235259; found: 510.236039.

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Similarly prepared from 1(d) were the following:

Example 1111

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(S)-2-phenylsulfonylamino-3-[[8-(2-pyridinylamino)methyl-1-oxa-2-azaspiro-[4,5]-dec-2-en-3-yl]carbonylaminolpropionic acid

 ^{1}H NMR (DMSO-D6) d 8.8 (bs,1H), 8.23 (t, 1H, J = 6),

- 15 8.18 (d, 1H, J = 9), 7.85-7.40 (m, 5H), 7.03 (d, 1H, J = 9), 6.8 (t, 1H, J = 7), 3.93 (dd, 1H, J = 13, 7), 3.38 (m, 1H), 3.19 (bm, 3H), 2.8 (s, 2H), 1.85-1.2 (bm, 8H); MS calcd. for $C_{24}H_{29}N_5O_6S$ ([M+H]+): 516.2; found: 516.1. Example 1121
- 20 (S)-2-[(2.5-dimethylisoxazol-2-yl)sulfonyllamino-3-[[8-(2-pyridinylamino)methyl-1-oxa-2-azaspiro-[4.5]-dec-2-en-3-yllcarbonylaminolpropionic acid

 1H NMR (DMSO-D6) d 8.8 (bs.1H), 8.54 (d, 1H, J = 9),

8.27 (t, 1H, J = 6), 7.86 (m, 1H), 7.03 (d, 1H, J = 9),

3.94 (m, 1H), 3.44 (m, 1H), 3.19 (bm, 3H), 2.8 (s, 2H), 2.45 (s, 3H), 2.5 (s, 3H), 2.9 - 1.2 (bm, 8H); MS calcd. for $C_{23}H_{30}N_{6}O_{7}S$ ([M+H]⁺): 535.2; found: 535.1.

Example 3055

30 (S)-2-[(2.4.6-trimethylphenyl)sulfonyllamino-3-[[7-benzyloxycarbonyl-8-(2-imidazolylamino)methyl-1-oxa-2.7-diazaspiro-[4.4]-non-2-en-3-yllcarbonylaminolpropionic acid

Part A: N-Cbz-4-hydroxy-L-prolinol: A solution of N-Cbz-4-hydroxy-L-proline (50 gm, 0.188 mol) in

tetrahydrofuran (400 ml) was cooled to 0 °C in an ice bath under nitrogen and a solution of borane dimethylsulfide complex (2.0M in THF, 122 ml, 0.244 mol) was added dropwise over 1h. The resulting mixture is

- then allowed to stir overnight at room temperature. the reaction mixture was recooled to 0 °C and a second portion of borane-dimethylsulfide complex was added as described above. Reaction was again stirred at room temperature overnight, then cooled to 0 °C and quenched
- by addition of approximately 200ml of 1:1 methanol/water. Solvents were removed on rotary evaporator and residue diluted with water and extracted 4X with ethyl acetate. The combined extracts were washed with saturated aqueous sodium bicarbonate
- solution (2X) and brine (1X) then dried over anhydrous magnesium sulfate, filtered and evaporated to a clear oil (46.77 g, 99%) which was used without purification in part B below.

Part B. 1-benzyloxycarbonyl-2-(S)-t-

- butyldimethylsilyloxymethyl-4-hydroxypyrrolidine: A mixture of the compound of Part A above (46.77 g, 0.186 mol), triethylamine (51.8 g, 0.372 mol), and t-butyldimethylsilylchloride (30.86 g, 0.205 mol) in methylene chloride (375 ml) was stirred under nitrogen
- overnight at room temperature. An additional aliquot of silyl chloride (5 g, 0.033 mol) was added and stirring continued for 4-5 h. Reaction mixture was transferred to a separatory funnel and washed with water (4X) and brine (1X) then dried over anhydrous sodium sulfate,
- filtered and solvent removed *in vacuo*. The residue was chromatographed on silica gel (hexane hexane/ethyl acetate 8:2 hexane/ethyl acetate 7:3) to provide the silyl ether (47.11 g, 69%)
 - Part C. 1-benzyloxycarbonyl-2(S)-t-
- 35 <u>butyldimethylsilyloxymethyl-4-pyrrolidinone</u>: To a

solution of oxalyl chloride (12.4 ml, 0.142 mol) in methylene chloride (330 ml) precooled to -70 ℃ in an acetone/dry ice bath was added a solution of anhydrous dimethylsulfoxide (20.60ml, 0.29 mol) in methylene chloride (66 ml) dropwise under nitrogen over 30 min at T < -65° C. The resulting mixture was stirred 15 min, followed by dropwise addition of a solution of the compound of part B above in methylene chloride (130 ml) over 45 min at T < -65°C. The reaction was stirred for 10 30 min followed by dropwise addition of triethylamine (119.2 ml, 0.855 mol) over 30 min again at T < -65°C. The cooling bath was removed and the reaction temperature was allowed to rise to 5-10°C, and then quenched by addition of 645 ml of 10% aqueous potassium hydrogen sulfate solution. The mixture was then 15 transferred to a separatory funnel and layers separated. The aqueous was extracted with methylene chloride and the combined organic layers are washed with 10% citric acid solution (3X) and brine (1X) then dried over anhydrous sodium sulfate, filtered and concentrated to a 20 clear oil (46.8 g, 100%) which was used without purification in part D below. Part D. 1-benzyloxycarbonyl-2(S)-tbutyldimethylsilyloxymethyl-4-methylenepyrrolidine: Methyltriphenylphosphonium bromide (68,98 g, 0.193 mol) 25 is added to a suspension of potassium t-butoxide (20.27 g, 0.181 mol) in anhydrous ether (700 ml) with stirring at 0°C under nitrogen. The resulting bright yellow solution is stirred for an additional 15 min. is added a solution of the compound of part D above 30 (46.8 g, 0.129 mol) in ether (100 ml). The mixture is allowed to assume room temperature and stirred overnight. The resulting mixture was cooled in an ice

bath and quenched by addition 700 ml of a saturated

solution of ammonium chloride. The phases were

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separated and aqueous reextracted 2X with ether. The combined organics were washed with brine and dried over anhydrous sodium sulfate, filtered and evaporated in vacuo. The crude product was purified by flash chromatography (silica gel, hexane-ether 9:1) to provide the olefin (42.6 g, 91%) as a pale yellow oil. Part E: 7-benzyloxycarbonyl-8-t-butyldimethylsilyloxymethyl-3-ethoxycarbonyl-1-oxa-2.7-diazaspiro-[4.4]-non-2-ene: The compound of part D above (13.04 g, 0.036 mol) was dissolved in methylene chloride (50 ml), 10 treated with ethyl chlorooximidoacetate (8.18 g., 0.054 mol), and the mixture was cooled to 0°C followed by dropwise addition of triethylamine (7.53 ml, 0.054 mol). The reaction was allowed to come to room temperature 15 over several hours then stirred overnight. An additional 1.5 eq. of the chlorooxime was then added, and the mixture was cooled to 0°C and treated with triethylamine (1.5 eq) as described above. Resulting mixture was stirred at room temperature for 48 h, then 20 diluted with additional methylene chloride and washed with 10% aqueous citric acid (3X), and brine (1X) then dried over anhydrous sodium sulfate, filtered and evaporated in vacuo. The crude was charged to silica gel and eluted first with Hexane/ether(80:20) to provide unreacted starting material (6.64 g, 51%) and then with 25 hexane/ethyl acetate (75:25) to provide the two diastereomers of the product (S,S isomer, 5.54 g, 32%; S,R isomer, 1.34 g, 8%). Anal. Calcd. for $C_{24}H_{36}N_2O_6Si$: C, 60.48; H, 7.61; N, 5.89. Found: C, 60.46; H, 7.33; N, 30 5.96. Part F: 7-benzyloxycarbonyl-8-t-butyldimethylsilyloxymethyl-3-carboxy-1-oxa-2.7-diazaspiro-[4.4]-non-2-ene: The compound of Part E above (18.7 g, 0.038 mol) was dissolved in methanol (200 ml) and treated at room 35 temperature with a solution of lithium hydroxide

monohydrate (2.4 g, 0.057 mol) in water (50 ml). The whole was stirred for 5 h and then solvent removed in vacuo. Water was added and the pH of the solution was adjusted to 4.4 with 10% ag. citric acid solution. resulting mixture was extracted 3X with ethyl acetate with adjustment of pH back to 4.4 between extractions. The combined extracts were washed with brine and dried over anhydrous sodium sulfate, filtered and evaporated. The residue was dried under vacuum to provide the acid (16.2 g, 95%) as a foam which was used without 10 purification in Part G below. MS(esi) m/z 449.4 (M+H)+, 335.2 (M+H-TBMDS)+ Part G: t-Butvl (S)-2-[(2.4.6-trimethylphenyl)sulfonyl]amino-3-[[7-benzyloxycarbonyl-8-(t-butyldimethylsilyloxv)methvl-1-oxa-2.7-diazaspiro-[4.4]-non-2-en-3-15 vllcarbonvlaminolpropionic acid: A mixture of the compound of Part F above (10 g, 0.022 mol), t-butyl 3amino-2-(2,4,6-trimethylphenylsulfonylamino)propionate (7.6 g, 0.022 mol), N-methylmorpholine (5.4 ml, (0.049 mol) and Castro's reagent (14.8 g, 0.033 mol) in N, N-20 dimethylformamide (100 ml) was stirred under nitrogen at room temperature overnight. The DMF was removed in vacuo and the residue diluted with 500 ml water and extracted 3X with ethyl acetate. The combined extracts were washed with water (2X), 10% citric acid (1X), 25 saturated sodium bicarbonate (1X) and brine (1X) then dried over anhydrous sodium sulfate, filtered and evaporated. The coupling product was purified by filtration through a pad of silica gel eluted with hexane/ethyl acetate (4:1) to provide the product as a 30 white foam (15 gm, 88%). MS(esi) m/z 773.4 (M+H) + 795.4 $(M+Na)^+$. Part H: t-Butyl (S)-2-[(2.4.6-trimethylphenyl)sulfonyl]amino-3-[[7-benzyloxycarbonyl-8-hydroxymethyl-1-oxa-2.7diazaspiro-[4,4]-non-2-en-3-vllcarbonvlamino]propionic 35

acid: The compound of Part G above (2.8 g, 3.62 mmol) was dissolved in tetrahydrofuran (12 ml) and treated with tetra-n-butylammonium floride (5.8 ml of a 1.0 M solution in THF, 5.8 mmol). The resulting solution was stirred overnight at room temperature. Reaction was quenched by addition of water and THF removed on rotary evaporator. The remaining aqueous was extracted 3X with ethyl acetate. The combined extracts were washed with water and brine, dried over anhydrous sodium sulfate,

filtered and evaporated. Chromatography on silica gel (hexane/ethyl acetate 1:1 followed by methylene chloride/methanol 95:5) provided the alcohol (2.02 g., 85%) ms m/z 659.3 (M+H)+.

Part I: t-Butyl (S)-2-[(2.4.6-trimethylphenyl)sulfonyl]-

- amino-3-[[7-benzyloxycarbonyl-8-formyl-1-oxa-2.7-diazaspiro-[4.4]-non-2-en-3-yllcarbonylaminolpropionic acid: A solution of the compound of Part H above (0.8 g, 1.21 mmol) in anhydrous methylene chloride (1 ml) was added dropwise to a a solution of Dess-Martin
- periodinane (0.59g, 1.30 mmol) in approximately 4 ml of dry methylene chloride at room temperature under nitrogen. The resulting mixture was stirred for 1 hr, the diluted with ethyl acetate and poured into a solution of saturated sodium bicarbonate (20 ml)
- containing 5 g sodium thiosulfate. This was stirred for 10 min. The phases were separated, aqueous reextracted with ethyl acetate, and combined organics washed with saturated sodium bicarbonate, water and brine, then dried over anhydrous magnesium sulfate, filtered and
- evaporated to give the aldehyde as a clear oil (0.74 g, 93%).
 - Part J: t-Butyl (S)-2-[(2.4.6-trimethylphenyl)sulfonyl]-amino-3-[[7-benzyloxycarbonyl-8-(imidazol-2-ylamino)methyl-1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
- 35 <u>vllcarbonylaminolpropionic acid:</u> To a solution of the

compound of Part I above (0.73 g, 1.11 mmol) in benzene was added anhydrous magnesium sulfate (0.588 g, 4.88 mmol) and 2-amino-1-tritylimidazole (0.398 g, 1.22 mmol) and the whole was refluxed for 4 hrs under nitrogen. The mixture was cooled to room temperature, filtered under nitrogen and benzene removed in vacuo. The residue was taken up in 1,2-dichloroethane, treated under nitrogen at room temperature with sodium triacetoxyborohydride (0.588 g, 2.78 mmol), and the whole was stirred overnight. The reaction was quenched 10 by addition of water and then diluted with ethyl acetate. Aqueous was reextracted with ethyl acetate, and combined organic layers were washed with saturated sodium bicarbonate, water and brine, then dried over anhydrous magnesium sulfate, filtered and evaporated. 15 Filtration through silica gel provided the desired product (0.682 g, 63%) as an off-white foam which was used without further purification in part K below. Part K: (S)-2-[(2.4.6-trimethylphenyl)sulfonyll-amino-3-[[7-benzyloxycarbonyl-8-(imidazol-2-ylamino)methyl-1-20 oxa-2.7-diazaspiro-[4.4]-non-2-en-3-yllcarbonylamino]propionic acid: The compound of part J above (0.3 g, 0.31 mmol) was dissolved in 20% acetic acid in methanol (10 ml) and refluxed for 24 h under nitrogen. reaction was cooled to room temperature, methanol 25 removed by evaporation and residue diluted with ethyl acetate. This solution was washed with saturated sodium bicarbonate (2X), water and brine then dried over anhydrous magnesium sulfate, filtered and evaporated. Filtration through silica gel (eluted with (i)methylene 30 chloride/methanol 95:5; (2) methylene chloride/methanol/conc. ammonium hydroxide 95:5:0/5; (3) 90/10/1) provided the intermediate detritylated t-butyl ester 0.139 mg, 62%). This was taken up in methylene chloride (8 ml) and trifluoroacetic acid (2 ml) was 35

added. The solution was stirred for 72 h, then evaporated and triturated with ether. The resulting solid was purified by prep HPLC (C18, gradient from 100% A to 100% B: A=90/10/0.05 $H_2O/CH_3CN/TFA$; B=90/10/0.05 $CH_3CN/H_2O/TFA$) to provide the title compound (0.078g, 50%). MS m/z 690.4 (M+Na)+ 668.4 (M+H)+.

Example 3063: (S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[8-(imidazol-2-ylamino)methyl-1-oxa-2,7-

10 <u>diazaspiro-[4.4]-non-2-en-3-yllcarbonylaminol-propionic</u> acid

The compound of Example 3055, Part J, (0.1 g, 0.1 mmol) was taken up in neat trifluoroacetic acid (3 ml) and the mixture refluxed for 1.5 h. Reaction was cooled to room temperature and TFA removed *in vacuo*. The residue was purified by prep HPLC using the system described under Ex. 3055, Part K above to provide the title compound (0.043 g, 80%). MS m/z 534.4 (M+H)+.

Using the methods described above and modifications thereof known to one skilled in the art of organic synthesis, additional compounds of the present invention can be prepared, including, but not limited to the representative compounds listed in the Tables below.

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Utility

The compounds of Formula I of the present invention possess activity as antagonists of integrins such as, for example, the $\alpha_{\nu}\beta_{3}$ or vitronectin receptor, $\alpha_{\nu}\beta_{5}$ or $\alpha_{5}\beta_{1}$, and as such have utility in the treatment and diagnosis of cell adhesion, angiogenic disorders, inflammation, bone degradation, cancer metastases, diabetic retinopathy, thrombosis, restenosis, macular degeneration, and other conditions mediated by cell

adhesion and/or cell migration and/or angiogenesis. The integrin antagonist activity of the compounds of the present invention is demonstrated using assays which measure the binding of a specific integrin to a native ligand, for example, using the ELISA assay described below for the binding of vitronectin to the $\alpha_{V}\beta_{3}$ receptor.

The compounds of the present invention possess selectivity for the $\alpha_V\beta_3$ receptor relative to the GPIIb/IIIa receptor as demonstrated by their lack of activity in standard assays of platelet aggregation, such as the platelet aggregation assay described below.

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One of the major roles of integrins in vivo is to mediate cellular interactions with adjacent cells. Cell based adhesion assays can be used to mimic these interactions in vitro. A cell based assay is more representative of the in vivo situation than an ELISA since the receptor is maintained in membranes in the native state. The compounds of the present invention have activity in cell-based assays of adhesion, for example as demonstrated in using the cell adhesion assays described below.

The compounds of Formula I of the present invention

25 may be useful for the treatment or prevention of other
diseases which involve cell adhesion processes,
including, but not limited to, osteoporosis, rheumatoid
arthritis, autoimmune disorders, bone degradation,
rheumatoid arthritis, asthma, allergies, adult

30 respiratory distress syndrome, graft versus host
disease, organ transplantation, septic shock, psoriasis,
eczema, contact dermatitis, osteoarthritis,
atherosclerosis, metastasis, wound healing, inflammatory
bowel disease and other angiogenic disorders.

The compounds of Formula I have the ability to suppress/inhibit angiogenesis *in vivo*, for example, as demonstrated using animal models of ocular neovascularization.

The compounds provided by this invention are also useful as standards and reagents in determining the ability of a potential pharmaceutical to inhibit integrin-ligand binding. These may be provided in a commercial kit comprising a compound of this invention.

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As used herein "µg" denotes microgram, "mg" denotes milligram, "g" denotes gram, "µL" denotes microliter, "mL" denotes milliliter, "L" denotes liter, "nM" denotes nanomolar, "µM" denotes micromolar, "mM" denotes millimolar, "M" denotes molar and "nm" denotes nanometer. "Sigma" stands for the Sigma-Aldrich Corp. of St. Louis, MO.

The utility of the compounds of the present 20 invention may be assessed by testing in one or more of the following assays as described in detail below: Purified $\alpha_{\nu}\beta_{3}$ (human placenta) - Vitronectin ELISA, $\alpha_{\nu}\beta_3$ -Vitronectin Binding Assay, Human Aortic Smooth Muscle Cell Migration Assay, In Vivo Angiogenesis Model, 25 Pig Restenosis Model, Mouse Retinopathy Model. A compound of the present invention is considered to be active if it has an IC_{50} or K_i value of less than about 10 μM for the inhibition of $\alpha_{\nu}\beta_3$ -Vitronectin Binding Assay, with compounds preferably having K; values of 30 less than about 0.1 μM . Tested compounds of the present invention are active in the $\alpha_{V}\beta_{3}$ -Vitronectin Binding Assay as well as in cell-based assays of integrin adhesion mediated by the $\alpha_{\nu}\beta_{3}$ -receptor.

35 Purified α_νβ₃ (human placenta) - Vitronectin ELISA

The $\alpha_{\nu}\beta_{3}$ receptor was isolated from human placental extracts prepared using octylglucoside. The extracts were passed over an affinity column composed of anti- $\alpha_{\nu}\beta_{3}$ monoclonal antibody (LM609) to Affigel. The column was subsequently washed extensively at pH 7 and pH 4.5 followed by elution at pH 3. The resulting sample was concentrated by wheat germ agglutinin chromatography to provide gave two bands on SDS gel which were confirmed as $\alpha_{\nu}\beta_{3}$ by western blotting.

Affinity purified protein was diluted at different levels and plated to 96 well plates. ELISA was performed using fixed concentration of biotinylated vitronectin (approximately 80 nM/well). This receptor preparation contains the $\alpha_{\nu}\beta_{3}$ with no detectable levels of $\alpha_{\nu}\beta_{5}$ according to the gel $(\alpha_{\nu}\beta_{3})$ and according to effects of blocking antibodies for the $\alpha_{\nu}\beta_{3}$ or $\alpha_{\nu}\beta_{5}$ in the ELISA.

A submaximal concentration of biotinylated vitronectin was selected based on conc. response curve with fixed receptor conc. and variable concentrations of biotinylated vitronectin.

ανβ3-Vitronectin Binding Assay

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The purified receptor is diluted with coating buffer (20 mM Tris HCl, 150 mM NaCl, 2.0 mM CaCl₂, 1.0 mM MgCl₂·6H₂O, 1.0 mM MnCl₂·4H₂O) and coated (100 μ L/well) on Costar (3590) high capacity binding plates overnight at 4°C. The coating solution is discarded and the plates washed once with blocking/binding buffer (B/B buffer, 50 mM Tris HCl, 100 mM NaCl, 2.0 mM CaCl₂,1.0 mM MgCl₂·6H₂O,1.0 mM MnCl₂·4H₂O). Receptor is then blocked (200 μ L/well) with 3.5% BSA in B/B buffer for 2 hours at room temperature. After washing once with 1.0% BSA in B/B buffer, biotinylated vitronectin (100 μ L) and either inhibitor (11 μ L) or B/B buffer w/1.0% BSA (11 μ L) is added to each well. The plates are incubated 2 hours at

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room temperature. The plates are washed twice with B/B buffer and incubated 1 hour at room temperature with anti-biotin alkaline phosphatase (100 µL/well) in B/B buffer containing 1.0% BSA. The plates are washed twice 5 with B/B buffer and alkaline phosphatase substrate (100 μL) is added. Color is developed at room temperature. Color development is stopped by addition of 2N NaOH (25 $\mu L/\text{well})$ and absorbance is read at 405 nm. The IC50 is the concentration of test substance needed to block 50% of the vitronectin binding to the receptor.

Integrin Cell-Based Adhesion Assays

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In the adhesion assays, a 96 well plate was coated with the ligand (i.e., fibrinogen) and incubated 15 overnight at 4° C. The following day, the cells were harvested, washed and loaded with a fluorescent dye. Compounds and cells were added together and then were immediately added to the coated plate. After incubation, loose cells are removed from the plate, and 20 the plate (with adherent cells) is counted on a fluorometer. The ability of test compounds to inhibit cell adhesion by 50% is given by the IC50 value and represents a measure of potency of inhibition of integrin mediated binding. Compounds were tested for 25 their ability to block cell adhesion using assays specific for $\alpha_{\nu}\beta_{3}$, $\alpha_{\nu}\beta_{5}$ and $\alpha_{5}\beta_{1}$ integrin interactions.

Platelet Aggregation Assay

Venous blood was obtained from anesthetized mongrel 30 dogs or from healthy human donors who were drug- and aspirin-free for at least two weeks prior to blood collection. Blood was collected into citrated Vacutainer tubes. The blood was centrifuged for 15 minutes at 150 x g (850 RPM in a Sorvall RT6000 Tabletop Centrifuge 35 with H-1000 B rotor) at room temperature, and platelet-

rich plasma (PRP) was removed. The remaining blood was centrifuged for 15 minutes at 1500 x g (26,780 RPM) at room temperature, and platelet-poor plasma (PPP) was removed. Samples were assayed on a PAP-4 Platelet

5 Aggregation Profiler, using PPP as the blank (100% transmittance). 200 µL of PRP (5x108 platelets/mL) were added to each micro test tube, and transmittance was set to 0%. 20 µL of ADP (10 µM) was added to each tube, and the aggregation profiles were plotted (% transmittance versus time). Test agent (20 µL) was added at different concentrations prior to the addition of the platelet agonist. Results are expressed as % inhibition of agonist-induced platelet aggregation.

Human Aortic Smooth Muscle Cell Migration Assav A method for assessing $\alpha_{\nu}\beta_{3}$ -mediated smooth muscle cell migration and agents which inhibit $\alpha_{\nu}\beta_{3}$ -mediated smooth muscle cell migration is described in Liaw et al., J. Clin. Invest. (1995) 95: 713-724).

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In Vivo Angiogenesis Model

A quantitative method for assessing angiogenesis and antiangiogenic agents is described in Passaniti et al., Laboratory Investigation (1992) 67: 519-528

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Pig Restenosis Model

A method for assessing restenosis and agents which inhibit restenosis is described in Schwartz et al., J. Am. College of Cardiology (1992) 19: 267-274.

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Mouse Retinopathy Model

A method for assessing retinopathy and agents which inhibit retinopathy is described in Smith et al., Invest. Ophthal. & Visual Science (1994) 35: 101-111.

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Dosage and Formulation

The compounds of this invention can be administered by any means that produces contact of the active agent with the agent's site of action, the $\alpha_V\beta_3$ integrin, in the body of a mammal. They can be administered by any conventional means available for use in conjunction with pharmaceuticals, either as individual therapeutic agents or in a combination of therapeutic agents, such as a antiplatelet agent such as aspirin, piroxicam, or 10 ticlopidine which are agonist-specific, or an anti-coagulant such as warfarin or heparin, or a thrombin inhibitor such as a boropeptide, hirudin or argatroban, or a thrombolytic agent such as tissue plasminogen activator, anistreplase, urokinase or 15 streptokinase, or combinations thereof. The compounds of the invention, or compounds of the invention in combination with other therapeutic agents, can be administered alone, but generally administered with a pharmaceutical carrier selected on the basis of the 20 chosen route of administration and standard pharmaceutical practice.

The dosage of the novel cyclic compounds of this invention administered will, of course, vary depending upon known factors, such as the pharmacodynamic characteristics of the particular agent and its mode and route of administration; the age, health and weight of the recipient; the nature and extent of the symptoms; the kind of concurrent treatment; the frequency of treatment; and the effect desired. A daily dosage of active ingredient can be expected to be about 0.001 to 10 milligrams per kilogram of body weight.

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Dosage forms (compositions suitable for administration) contain from about 0.1 milligram to about 100 milligrams of active ingredient per unit. In

these pharmaceutical compositions the active ingredient will ordinarily be present in an amount of about 0.5-95% by weight based on the total weight of the composition.

The active ingredient can be administered orally in solid dosage forms, such as capsules, tablets, and powders, or in liquid dosage forms, such as elixirs, syrups, and suspensions. It can also be administered parenterally, in sterile liquid dosage forms.

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Gelatin capsules contain the active ingredient and powdered carriers, such as lactose, starch, cellulose derivatives, magnesium stearate, stearic acid, and the like. Similar diluents can be used to make compressed tablets. Both tablets and capsules can be manufactured as sustained release products to provide for continuous release of medication over a period of hours. Compressed tablets can be sugar coated or film coated to mask any unpleasant taste and protect the tablet from the atmosphere, or enteric coated for selective disintegration in the gastrointestinal tract.

Liquid dosage forms for oral administration can contain coloring and flavoring to increase patient acceptance.

In general, water, a suitable oil, saline, aqueous dextrose (glucose), and related sugar solutions and glycols such as propylene glycol or polyethylene glycols are suitable carriers for parenteral solutions.

Solutions for parenteral administration preferably contain a water soluble salt of the active ingredient, suitable stabilizing agents, and if necessary, buffer substances. Antioxidizing agents such as sodium bisulfite, sodium sulfite, or ascorbic acid, either alone or combined, are suitable stabilizing agents.

Also used are citric acid and its salts and sodium EDTA. In addition, parenteral solutions can contain

preservatives, such as benzalkonium chloride, methyl- or propyl-paraben, and chlorobutanol.

Suitable pharmaceutical carriers are described in Remington's Pharmaceutical Sciences, Mack Publishing Company, a standard reference text in this field.

Useful pharmaceutical dosage-forms for administration of the compounds of this invention can be illustrated as follows:

10 <u>Capsules</u>

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A large number of unit capsules are prepared by filling standard two-piece hard gelatin capsules each with 10 milligrams of powdered active ingredient, 150 milligrams of lactose, 50 milligrams of cellulose, and 6 milligrams magnesium stearate.

Soft Gelatin Capsules

A mixture of active ingredient in a digestable oil such as soybean oil, cottonseed oil or olive oil is prepared and injected by means of a positive displacement pump into gelatin to form soft gelatin capsules containing 10 milligrams of the active ingredient. The capsules are washed and dried.

25 Tablets

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A large number of tablets are prepared by conventional procedures so that the dosage unit was 10 milligrams of active ingredient, 0.2 milligrams of colloidal silicon dioxide, 5 milligrams of magnesium stearate, 275 milligrams of microcrystalline cellulose, 11 milligrams of starch and 98.8 milligrams of lactose. Appropriate coatings may be applied to increase palatability or delay absorption.

The combination products of this invention, such as the novel $\alpha_V \beta_3$ antagonist compounds of this invention in combination with an anti-coagulant agent such as warfarin or heparin, or an anti-platelet agent such as aspirin, piroxicam or ticlopidine, or a thrombin inhibitor such as a boropeptide, hirudin or argatroban, or a thrombolytic agent such as tissue plasminogen activator, anistreplase, urokinase or streptokinase, or combinations thereof, can be in any dosage form, such as those described above, and can also be administered in various ways, as described above.

In a preferred embodiment, the combination products of the invention are formulated together, in a single dosage form (that is, combined together in one capsule, tablet, powder, or liquid, etc.). When the combination 15 products are not formulated together in a single dosage form, the $\alpha_{V}\beta_{3}$ antagonist compounds of this invention and the anti-coagulant agent, anti-platelet agent, thrombin inhibitor, and/or thrombolytic agent may be administered at the same time (that is, together), or in any order, 20 for example the compounds of this invention are administered first, followed by administration of the anti-coagulant agent, anti-platelet agent, thrombin inhibitor, and/or thrombolytic agent. When not administered at the same time, preferably the 25 administration of the compound of this invention and any anti-coagulant agent, anti-platelet agent, thrombin inhibitor, and/or thrombolytic agent occurs less than about one hour apart, more preferably less than about 30 minutes apart, even more preferably less than about 15 30 minutes apart, and most preferably less than about 5 minutes apart. Preferably, administration of the combination products of the invention is oral. terms oral agent, oral inhibitor, oral compound, or the like, as used herein, denote compounds which may be 35

orally administered. Although it is preferable that the $\alpha_{\nu}\beta_{3}$ antagonist compounds of this invention and the anti-coagulant agent, anti-platelet agent, thrombin inhibitor, and/or thrombolytic agent are both administered in the same fashion (that is, for example, both orally), if desired, they may each be administered in different fashions (that is, for example, one component of the combination product may be administered orally, and another component may be administered intravenously). The dosage of the combination products 10 of the invention may vary depending upon various factors such as the pharmacodynamic characteristics of the particular agent and its mode and route of administration, the age, health and weight of the 15 recipient, the nature and extent of the symptoms, the kind of concurrent treatment, the frequency of treatment, and the effect desired, as described above.

As discussed above, where two or more of the foregoing therapeutic agents are combined or 20 co-administered with the compounds of this invention, generally the amount of each component in a typical daily dosage and typical dosage form may be reduced relative to the usual dosage of the agent when administered alone, in view of the additive or 25 synergistic effect which would be obtained as a result of addition of further agents in accordance with the present invention.

Particularly when provided as a single dosage form, the potential exists for a chemical interaction between the combined active ingredients (for example, a novel compound of this invention and an anti-coagulant such as warfarin or heparin, or a novel compound of this invention and an anti-platelet agent such as aspirin, piroxicam or ticlopidine, or a novel compound of this invention and a thrombin inhibitor such as a

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boropeptide, hirudin or argatroban, or a novel compound of this invention and a thrombolytic agent such as tissue plasminogen activator, anistreplase, urokinase or streptokinase, or combinations thereof). For this reason, the preferred dosage forms of the combination products of this invention are formulated such that although the active ingredients are combined in a single dosage form, the physical contact between the active ingredients is minimized (that is, reduced).

In order to minimize contact, one embodiment of 10 this invention where the product is orally administered provides for a combination product wherein one active ingredient is enteric coated. By enteric coating one of the active ingredients, it is possible not only to minimize the contact between the combined active 15 ingredients, but also, it is possible to control the release of one of these components in the gastrointestinal tract such that one of these components is not released in the stomach but rather is released in the intestines. Another embodiment of this invention 20 where oral administration is desired provides for a combination product wherein one of the active ingredients is coated with a sustained-release material which effects a sustained-release throughout the gastrointestinal tract and also serves to minimize 25 physical contact between the combined active ingredients. Furthermore, the sustained-released component can be additionally enteric coated such that the release of this component occurs only in the intestine. Still another approach would involve the 30 formulation of a combination product in which the one component is coated with a sustained and/or enteric release polymer, and the other component is also coated with a polymer such as a low viscosity grade of hydroxypropyl methylcellulose (HPMC) or other 35

appropriate materials as known in the art, in order to further separate the active components. The polymer coating serves to form an additional barrier to interaction with the other component.

5 Dosage forms of the combination products of the present invention wherein one active ingredient is enteric coated can be in the form of tablets such that the enteric coated component and the other active ingredient are blended together and then compressed into a tablet or such that the enteric coated component is compressed into one tablet layer and the other active ingredient is compressed into an additional layer. Optionally, in order to further separate the two layers, one or more placebo layers may be present such that the placebo layer is between the layers of active ingredients. In addition, dosage forms of the present invention can be in the form of capsules wherein one active ingredient is compressed into a tablet or in the form of a plurality of microtablets, particles, granules or non-perils, which are then enteric coated. These enteric coated microtablets, particles, granules or nonperils are then placed into a capsule or compressed into a capsule along with a granulation of the other active ingredient.

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25 These as well as other ways of minimizing contact between the components of combination products of the present invention, whether administered in a single dosage form or administered in separate forms but at the same time by the same manner, will be readily apparent 30 to those skilled in the art, once armed with the present disclosure.

Pharmaceutical kits useful in, for example, the inhibition of thrombus formation, the prevention of blood clots, and/or the treatment of thromboembolic

disorders, which comprise a therapeutically effective amount of a compound according to the method of the present invention along with a therapeutically effective amount of an anti-coagulant agent such as warfarin or heparin, or an antiplatelet agent such as aspirin, piroxicam or ticlopidine, or a thrombin inhibitor such as a boropeptide, hirudin or argatroban, or a thrombolytic agent such as tissue plasminogen activator. anistreplase, urokinase or streptokinase, or 10 combinations thereof, in one or more sterile containers. are also within the ambit of the present invention. Sterilization of the container may be carried out using conventional sterilization methodology well known to those skilled in the art. The sterile containers of 15 materials may comprise separate containers, or one or more multi-part containers, as exemplified by the UNIVIAL™ two-part container (available from Abbott Labs, Chicago, Illinois), as desired. The compounds according to the method of the invention and the anti-coagulant agent, anti-platelet agent, thrombin inhibitor, 20 thrombolytic agent, and/or combinations thereof, may be separate, or combined into a single dosage form as described above. Such kits may further include, if desired, one or more of various conventional 25 pharmaceutical kit components, such as for example, one or more pharmaceutically acceptable carriers, additional vials for mixing the components, etc., as will be readily apparent to those skilled in the art. Instructions, either as inserts or as labels, indicating quantities of the components to be administered, 30 guidelines for administration, and/or guidelines for mixing the components, may also be included in the kit.

Representative compounds of the present invention are listed in the Tables below.

Table 1

Ex. No.	R ¹	Ľ	R ¹⁴	R ¹⁵	<u>MS</u>
1001	imidazol-2-yl- aminomethyl	1	Н	н	
1002	imidazol-2-yl- aminomethyl	1	н	NHCO ₂ Bn	
1003	imidazol-2-yl- aminomethyl	1	н	NHCO ₂ CH ₂ C ₆ H ₄ -(2- CH ₃)	
1004	imidazol-2-yl- aminomethyl	1	н	NHCO ₂ CH ₂ C ₆ H ₄ - (3 - CH ₃)	
1005	imidazol-2-yl- aminomethyl	1	н	NHCO ₂ CH ₂ C ₆ H ₄ -	
1006	imidazol-2-yl- aminomethyl	1	н	NHCO ₂ CH ₂ (2-pyridinyl)	
1007	imidazol-2-yl- aminomethyl	1,	Н	NHCO2CH2 (3-	
1008	imidazol-2-yl-	1	Н	pyridinyl) NHCO ₂ CH ₂ (4-	
1009	aminomethyl imidazol-2-yl-	1	н	pyridinyl) NHCO ₂ CH ₂ (2-	
1010	aminomethyl imidazol-2-yl-	1	н	thiazolyl) NHCO ₂ CH ₂ (4-	
1011	aminomethyl imidazol-2-yl-	1	н	thiazolyl) NHCO ₂ CH ₂ (5-	
1012	aminomethyl imidazol-2-yl-	1	н	thiazolyl) NHCO ₂ CH ₂ (4-	
	aminomethyl			isoxazolyl)	

1013	imidazol-2-yl-	1	Н	NHCO2CH2 (2-
	aminomethyl			thienyl)
1014	imidazol-2-yl-	1	н	NHCO2CH2 (5-
	aminomethyl			isoxazolyl)
1015	imidazol-2-yl-	1	Н	NHCO2n-Bu
	aminomethyl			
1016	imidazol-2-yl-	1	н	NHCO2i-Bu
	aminomethyl			
1017	imidazol-2-yl-	1	н	NHCO2t-Bu
	aminomethyl			
1018	imidazol-2-yl-	1	н	NHCOCH ₂ Ph
	aminomethyl			
1019	imidazol-2-yl-	1	Н	NHCOCH2C6H4-(2-
	aminomethyl			СН3)
1020	imidazol-2-yl-	1	н	NHCOCH2C6H4-(3-
	aminomethyl			CH3)
1021	imidazol-2-yl-	1	Н	NHCOCH2C6H4-(4-
	aminomethyl			CH3)
1022	imidazol-2-yl-	1	Н	NHCOCH ₂ (2-
	aminomethyl			pyridinyl)
1023	imidazol-2-yl-	1	н	NHCOCH ₂ (3-
	aminomethyl			pyridinyl)
1024	imidazol-2-yl-	1	Н	NHCOCH ₂ (4-
	aminomethyl			pyridinyl)
1025	imidazol-2-yl-	1	н	NHCOCH ₂ (2-
	aminomethyl			thiazolyl)
1026	imidazol-2-yl-	1	н	NHCOCH ₂ (4-
	aminomethyl			thiazolyl)
1027	imidazol-2-yl-	1	Н	NHCOCH ₂ (5-
	aminomethyl			thiazolyl)
1028	imidazol-2-yl-	1	Н	NHCOCH ₂ (4-
	aminomethyl			isoxazol)
1029	imidazol-2-yl-	1	н	NHCOCH ₂ (2-
	aminomethyl			thienyl)

1030	imidazol-2-yl-	1	н	NHCOn-Bu	
	aminomethyl				
1031	imidazol-2-yl-	1	н	NHCOt -Bu	
	aminomethyl				
1032	imidazol-2-yl-	1	Н	NHSO ₂ Ph	505.2
	aminomethyl				
1033	imidazol-2-yl-	1	Н	NHSO2C6H4-(2-	
	aminomethyl			CH ₃)	
1034	imidazol-2-yl-	1	Н	NHSO2C6H4-(3-	
	aminomethyl			CH ₃)	
1035	imidazol-2-yl-	1	Н	NHSO2C6H4-(4-	
	aminomethyl	*		CH ₃)	
1036	imidazol-2-yl-	1	Н	NHSO ₂ (2-pyridyl)	
	aminomethyl				
1037	imidazol-2-yl-	1	н	NHSO ₂ (3-pyridyl)	
	aminomethyl				
1038	imidazol-2-yl-	1	н	NHSO ₂ (4-pyridyl)	
	aminomethyl				
1039	imidazol-2-yl-	1	Н	NHSO ₂ (2-thiaz-	
	aminomethyl			olyl)	
1040	imidazol-2-yl-	1	н	NHSO2 (3-	
	aminomethyl			thiazolyl)	
1041	imidazol-2-yl-	1	н	NHSO2 (4-	
	aminomethyl			isoxazolyl)	
1042	imidazol-2-yl-	1	Н	NHSO2[4-(3,5-	
	aminomethyl			dimethyl)isoxaz	
				olyl]	
1043	imidazol-2-yl-	1	н	NHSO2C6H4-(2-	
	aminomethyl			Br)	
1044	imidazol-2-yl-	1	н	NHSO2C6H4-(3-	
	aminomethyl			Br)	
1045	imidazol-2-yl-	1	Н	NHSO2C6H4-(4-	
	aminomethyl			Br)	
1046	imidazol-2-yl-	1	Н	NHSO2C6H4-(2-F)	
	aminomethyl				

1047	imidazol-2-yl- aminomethyl	1	Н	NHSO ₂ C ₆ H ₄ - (3-F)	
1048	imidazol-2-yl-	1	н	NHSO ₂ C ₆ H ₄ -(4-F)	
	aminomethyl				
1049	imidazol-2-yl-	1	н	NHSO2 (2-	555.2
	aminomethyl			naphthyl)	
1050	imidazol-2-yl-	1	н	NHSO2 (1-	
	aminomethyl			naphthyl)	
1051	imidazol-2-yl-	1	н	NHSO2CH=CHPh	
	aminomethyl				
1052	imidazol-2-yl-	1	н	NHSO2CH2Ph	
	aminomethyl				
1053	imidazol-2-yl-	1	н	NHSO2CH2CH=CH-Ph	
	aminomethyl				
1054	imidazol-2-yl-	1	н	NHSO2-n-Bu	
	aminomethyl				
1055	imidazol-2-yl-	1	Н	NHSO2-i-Bu	
	aminomethyl				
1056	imidazol-2-yl-	1	н	NHSO2-t-Bu	
	aminomethyl				
1057	imidazol-2-yl-	1	н	NHSO2NHPh	
	aminomethyl				
1058	imidazol-2-yl-	1	н	NHSO2NHC6H4-(2-	
	aminomethyl			CH3)	
1059	imidazol-2-yl-	1	Н	NHSO2NHC6H4-(3-	
	aminomethyl			CH ₃)	
1060	imidazol-2-yl-	1	Н	NHSO2NHC6H4-(4-	
	aminomethyl			CH3)	
1061	imidazol-2-yl-		Н	NHSO2NH(2-	
	aminomethyl			pyridyl)	
1062	imidazol-2-yl-	1	н	NHSO2NH(3-	
	aminomethyl			pyridyl)	
1063	imidazol-2-yl-	1	н	NHSO2NH(4-	
	aminomethyl			pyridyl)	

1064	imidazol-2-yl-	1	Н	NHSO2NH(2-
•	aminomethyl			thiazolyl)
1065	imidazol-2-yl-	1	H	NHSO2NH(4-
	aminomethyl			thiazolyl)
1066	imidazol-2-yl-	1	Н	NHSO2NH (4-
	aminomethyl			isoxazolyl)
1067	imidazol-2-yl-	1	н	NHSO2 [4-(3,5-
	aminomethyl			dimethyl)isoxaz
				olylj
1068	imidazol-2-yl-	1	Н	NHSO2NHC6H4-(2-
	aminomethyl			Br)
1069	imidazol-2-yl-	1	н	NHSO2NHC6H4-(3-
	aminomethyl			Br)
1070	imidazol-2-yl-	1	н	NHSO2NHC6H4-(4-
	aminomethyl			Br)
1071	imidazol-2-yl-	1	Н	NHSO2NHC6H4-(3-
	aminomethyl			F)
1072	imidazol-2-yl-	1	н	NHSO2NHC6H4-(4-
	aminomethyl			F)
1073	imidazol-2-yl-	1	н	NHSO2NH(2-
	aminomethyl			naphthyl)
1074	imidazol-2-yl-	1	Н	NHSO2NH(1-
	aminomethyl			naphthyl)
1075	imidazol-2-yl-	1	н	NHSO2NHCH=CH-Ph
	aminomethyl			
1076	imidazol-2-yl-	1	Н	NHSO2NHCH2Ph
	aminomethyl			
1077	imidazol-2-yl-	1	н	NHSO2NHCH2CH=CH-
	aminomethyl			Ph
1078	imidazol-2-yl-	1	Н	NHSO2NH-n-Bu
	aminomethyl			
1079	imidazol-2-yl-	1	н	NHSO2NH-i-Bu
	aminomethyl			
1080	imidazol-2-yl-	1	Н	NHSO2NH-t-Bu
	aminomethyl			

1081	pyridin-2-yl-	1	н	NHCO ₂ Bn 510.2	
	aminomethyl				
1082	pyridin-2-yl-	1	Н	NHCO2CH2C6H4-(2-	
	aminomethyl			CH ₃)	
1083	pyridin-2-yl-	1	Н	NHCO2CH2C6H4-	
	aminomethyl			(3-CH ₃)	
1084	pyridin-2-yl-	1	Н	NHCO2CH2C6H4-	
	aminomethyl			(4-CH ₃)	
1085	pyridin-2-yl-	1	Н	NHCO2CH2 (2-	
	aminomethyl			pyridinyl)	
1086	pyridin-2-yl-	1	Н	инсо ₂ сн ₂ (3-	
	aminomethyl	•		pyridinyl)	
1087	pyridin-2-yl-	1	н	NHCO2CH2 (4-	
	aminomethyl			pyridinyl)	
1088	pyridin-2-yl-	1	н	NHCO2CH2 (2-	
	ami nomethyl			thiazolyl)	
1089	pyridin-2-yl-	1	н	NHCO2CH2 (4-	
	aminomethyl			thiazolyl)	
1090	pyridin-2-yl-	1	н	NHCO2CH2 (5-	
	aminomethyl			thiazolyl)	
1091	pyridin-2-yl-	1	н	NHCO2CH2 (4-	
	aminomethyl			isoxazolyl)	
1092	pyridin-2-yl-	1	н	NHCO2CH2 (2-	
	aminomethyl			thienyl)	
1093	pyridin-2-yl-	1	Н	NHCO2n-Bu	
	aminomethyl				
1094	pyridin-2-yl-	1	н	NHCO2i-Bu	
	aminomethyl				
1095	pyridin-2-yl-	1	н	NHCO2t-Bu	
	aminomethyl				
1096	pyridin-2-yl-	1	н	NHCOCH ₂ Ph	
	aminomethyl				
1097	pyridin-2-yl-	1	н	NHCOCH2C6H4-(2-	
	aminomethyl			CH ₃)	

1098	pyridin-2-yl-	1	н	NHCOCH2-C6H4-	
	aminomethyl			(3-CH ₃)	
1099	pyridin-2-yl-	1	Н	NHCOCH2C6H4-(4-	
	aminomethyl			CH ₃)	
1100	pyridin-2-yl-	1	Н	NHCOCH ₂ (2-	
	aminomethyl			pyridinyl)	
1101	pyridin-2-yl-	1	Н	NHCOCH ₂ (3-	
	aminomethyl			pyridinyl)	
1102	pyridin-2-yl-	1	н	NHCOCH2 (4-	
	aminomethyl			pyridinyl)	
1103	pyridin-2-yl-	1	Н	NHCOCH ₂ (2-	
	aminomethyl	-		thiazolyl)	
1104	pyridin-2-yl-	1	н	NHCOCH ₂ (4-	
	aminomethyl			thiazolyl)	
1105	pyridin-2-yl-	1	н	NHCOCH ₂ (5-	
	aminomethyl			thiazolyl)	
1106					
1107	pyridin-2-yl-	1	н	NHCOCH ₂ (4-	
	aminomethyl			isoxazolyl)	
1108	pyridin-2-yl-	1 .	н	NHCOCH ₂ (2-	
	aminomethyl			thienyl)	
1109	pyridin-2-yl-	1	н	NHCOn-Bu	
	aminomethyl				
1110	pyridin-2-yl-	1	Н	NHCOt-Bu	
	aminomethyl				
1111	pyridin-2-yl-	1	н	NHSO ₂ Ph	516.1
	aminomethyl				
1112	pyridin-2-yl-	1	Н	NHSO2C6H4-(2-	
	aminomethyl			CH ₃)	
1113	pyridin-2-yl-	1	Н	$NHSO_2C_6H_4-(3-$	
	aminomethyl			CH ₃)	
1114	pyridin-2-yl-	1	Н	NHSO2C6H4-(4-	
	aminomethyl			СН3)	

1115	pyridin-2-yl-	1	Н	NHSO ₂ (2-pyridyl)	
	aminomethyl				
1116	pyridin-2-yl-	1	Н	NHSO ₂ (3-pyridyl)	
	aminomethyl				
1117	pyridin-2-yl-	1	Н	NHSO ₂ (4-pyridyl)	
	aminomethyl				
1118	pyridin-2-yl-	1	Н	NHSO2 (2-	
	aminomethyl			thiazolyl)	
1119	pyridin-2-yl-	1	н	NHSO2 (4-	
	aminomethyl			thiazolyl)	
1120	pyridin-2-yl-	1	н	NHSO2 (4-	
	aminomethyl	•		isoxazolyl)	
1121	pyridin-2-yl-	1	н	NHSO2-[4-(3,5-	535.1
	aminomethyl			dimethyl)isoxaz	
				olyl]	
1122	pyridin-2-yl-	1	н	NHSO2C6H4-(2-	
	aminomethyl			Br)	
1123	pyridin-2-yl-	1	н	NHSO2C6H4-(3-	
	aminomethyl			Br)	
1124	pyridin-2-yl-	1	н	NHSO2C6H4-(4-	
	aminomethyl			Br)	
1125	pyridin-2-yl-	1	н	$NHSO_2C_6H_4 - (2-F)$	
	aminomethyl				
1126	pyridin-2-yl-	1	н	$NHSO_2C_6H_4 - (3-F)$	
	aminomethyl				
1127	pyridin-2-yl-	1	н	$NHSO_2C_6H_4 - (4-F)$	
	aminomethyl				
1128	pyridin-2-yl-	1	н	NHSO2 (2-	
	aminomethyl			naphthyl)	
1129	pyridin-2-yl-	1	н	NHSO2 (1-	
	aminomethyl			naphthyl)	
1130	pyridin-2-yl-	1	н	NHSO2CH=CH-Ph	
	aminomethyl				
1131	pyridin-2-yl-	1	н	NHSO2CH2Ph	
	aminomethyl				

1132	pyridin-2-yl-	1	н	NHSO2-CH2CH=CH-
	aminomethyl			Ph
1133	pyridin-2-yl-	1	н	NHSO2-n-Bu
	aminomethyl			
1134	pyridin-2-yl-	1	Н	NHSO2-i-Bu
	aminomethyl			
1135	pyridin-2-yl-	1	Н	NHSO ₂ -t-Bu
	aminomethyl			•
1136	pyridin-2-yl-	1	н	NHSO2NHPh
	aminomethyl			
1137	pyridin-2-yl-	1	Н	$NHSO_2NHC_6H_4-(2-$
	aminomethyl	٠		СН3)
1138	pyridin-2-yl-	1	н	NHSO2NHC6H4-(3-
	aminomethyl			CH3)
1139	pyridin-2-yl-	1	H	$NHSO_2NHC_6H_4-(4-$
	aminomethyl			СН3)
1140	pyridin-2-yl-	1	Н	NHSO2NH(2-
	aminomethyl			pyridyl)
				VELOC VEL (2
1141	pyridin-2-yl-	1	Н	NHSO ₂ NH(3-
	aminomethyl			pyridyl)
1142	pyridin-2-yl-	1	Н	NHSO2NH(4-
	aminomethyl			pyridyl)
1143	pyridin-2-yl-	1	Н	NHSO2NH(2-
	aminomethyl			thiazolyl)
1144	pyridin-2-yl-	1	H	NHSO ₂ NH-(4-
	aminomethyl			thiazolyl)
1145	pyridin-2-yl-	1	Н	NHSO ₂ NH (4-
	aminomethyl			isoxazoly1)
1146	pyridin-2-yl-	1	Н	$NHSO_2 - [4 - (3, 5 -$
	aminomethyl			dimethyl)isoxaz
				olyl)
1147	pyridin-2-yl-	1	Н	$NHSO_2NHC_6H_4-(2-$
	aminomethyl			Br)

1148	pyridin-2-yl-	1	Н	NHSO2NHC6H4-(3-
	aminomethyl			Br)
1149	pyridin-2-yl-	1	Н	NHSO2NHC6H4-(4-
	aminomethyl			Br)
1150	pyridin-2-yl-	1	н	NHSO2NHC6H4-(3-
	aminomethyl			F)
1151	pyridin-2-yl-	1	Н	NHSO2NHC6H4-(4-
	aminomethyl			F)
1152	pyridin-2-yl-	1	н	NHSO2NH(2-
	aminomethyl			naphthyl)
1153	pyridin-2-yl-	1	Н	NHSO2NH)1-
	aminomethy1			naphthyl)
1154	pyridin-2-yl-	1	н	NHSO2NHCH=CH-Ph
	aminomethyl			
1155	pyridin-2-yl-	1	Н	NHSO2NHCH2Ph
	aminomethyl			
1156	pyridin-2-yl-	1	Н	NHSO2NHCH2CH=CH-
	aminomethyl			Ph
1157	aminomethyl pyridin-2-yl-	1	Н	Ph NHSO ₂ NH-n-Bu
1157	•	1	н	
1157 1158	pyridin-2-yl-	1	н	
	pyridin-2-yl- aminomethyl			NHSO ₂ NH-n-Bu
	pyridin-2-yl- aminomethyl pyridin-2-yl-			NHSO ₂ NH-n-Bu
1158	pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl	1	н	NHSO ₂ NH-n-Bu NHSO ₂ NH-i-Bu
1158	pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl pyridin-2-yl-	1	н	NHSO ₂ NH-n-Bu NHSO ₂ NH-i-Bu
1158	pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl	1	н	NHSO ₂ NH-n-Bu NHSO ₂ NH-i-Bu NHSO ₂ NH-t-Bu
1158	pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl tetrahydropyrimidin	1	н	NHSO ₂ NH-n-Bu NHSO ₂ NH-i-Bu NHSO ₂ NH-t-Bu
1158 1159 1160	pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl tetrahydropyrimidin -2-ylaminomethyl	1 1 1	н	NHSO ₂ NH-n-Bu NHSO ₂ NH-i-Bu NHSO ₂ NH-t-Bu NHCOOBn
1158 1159 1160 1161	pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl tetrahydropyrimidin -2-ylaminomethyl tetrahydropyrimidin	1 1 1	н	NHSO ₂ NH-n-Bu NHSO ₂ NH-i-Bu NHSO ₂ NH-t-Bu NHCOOBn
1158 1159 1160 1161	pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl tetrahydropyrimidin -2-ylaminomethyl tetrahydropyrimidin -2-ylaminomethyl	1 1 1	н н н	NHSO ₂ NH-n-Bu NHSO ₂ NH-i-Bu NHSO ₂ NH-t-Bu NHCOOBn NHCO ₂ CH ₂ C ₆ H ₄ - (2-CH ₃)
1158 1159 1160 1161	pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl tetrahydropyrimidin -2-ylaminomethyl tetrahydropyrimidin -2-ylaminomethyl tetrahydropyrimidin	1 1 1	н н н	NHSO ₂ NH-n-Bu NHSO ₂ NH-i-Bu NHSO ₂ NH-t-Bu NHCOOBn NHCO ₂ CH ₂ C ₆ H ₄ - (2-CH ₃) NHCO ₂ CH ₂ C ₆ H ₄ -
1158 1159 1160 1161 1162	pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl tetrahydropyrimidin -2-ylaminomethyl tetrahydropyrimidin -2-ylaminomethyl tetrahydropyrimidin -2-ylaminomethyl	1 1 1 1	н н н	NHSO ₂ NH-n-Bu NHSO ₂ NH-i-Bu NHSO ₂ NH-t-Bu NHCOOBn NHCO ₂ CH ₂ C ₆ H ₄ - (2-CH ₃) NHCO ₂ CH ₂ C ₆ H ₄ - (3-CH ₃)
1158 1159 1160 1161 1162	pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl pyridin-2-yl- aminomethyl tetrahydropyrimidin -2-ylaminomethyl tetrahydropyrimidin -2-ylaminomethyl tetrahydropyrimidin -2-ylaminomethyl tetrahydropyrimidin -2-ylaminomethyl tetrahydropyrimidin	1 1 1 1	н н н	NHSO ₂ NH-n-Bu NHSO ₂ NH-i-Bu NHSO ₂ NH-t-Bu NHCOOBn NHCO ₂ CH ₂ C ₆ H ₄ - (2-CH ₃) NHCO ₂ CH ₂ C ₆ H ₄ - (3-CH ₃)

1165	tetrahydropyrimidin	1	Н	NHCO2CH2 (3-	
	-2-ylaminomethyl			pyridinyl)	
1166	tetrahydropyrimidin	1	Н	NHCO2CH2 (4-	
	-2-ylaminomethyl			pyridinyl)	
1167	tetrahydropyrimidin		н	NHCO2CH2 (2-	
	-2-ylaminomethyl			thiazolyl)	
1168	tetrahydropyrimidin	1	Н	NHCO2CH2 (4-	
	-2-ylaminomethyl			thiazolyl)	
1169	tetrahydropyrimidin	1	н	NHCO2CH2 (5-	
	-2-ylaminomethyl			thiazolyl)	
1170	tetrahydropyrimidin	1	Н	NHCO2CH2 (4-	
	-2-ylaminomethyl			isoxazolyl)	
1171	tetrahydropyrimidin	1	н	NHCO2CH2 (2-	
	-2-ylaminomethyl			thienyl)	
1172	tetrahydropyrimidin	1	H	NHCO2n-Bu	
	-2-ylaminomethyl				
1173	tetrahydropyrimidin	1	Н	NHCO2i-Bu	
	-2-ylaminomethyl				
1174	tetrahydropyrimidin	1	н	NHCO2t-Bu	
	-2-ylaminomethyl				•
1175	tetrahydropyrimidin	1	н	NHSO2Ph	521.3
	-2-ylaminomethyl				
1176	tetrahydropyrimidin	1	н	NHSO2C6H4-(2-	
	-2-ylaminomethyl			CH ₃)	
1177	tetrahydropyrimidin	1	н	NHSO ₂ C ₆ H ₄ -(3-	
	-2-ylaminomethyl			CH3).	
1178	tetrahydropyrimidin	1	н	NHSO2C6H4-(4-	
	-2-ylaminomethyl			CH ₃)	
1179	tetrahydropyrimidin	1	н	NHSO ₂ (2-pyridyl)	
	-2-ylaminomethyl				
1180	tetrahydropyrimidin	1	н	NHSO ₂ (3-pyridyl)	
	-2-ylaminomethyl				
1181	tetrahydropyrimidin	1	н	NHSO ₂ (4-pyridyl)	
	-2-ylaminomethyl				

1182	tetrahydropyrimidin	1	н	NHSO2 (2-
	-2-ylaminomethyl			thiazolyl)
1183	tetrahydropyrimidin	1	н	NHSO2 (4-
	-2-ylaminomethyl			thiazolyl)
1184	tetrahydropyrimidin	1	Н	NHSO2 (4-
	-2-ylaminomethyl			isoxazolyl)
1185	tetrahydropyrimidin	1	н	NHSO2-[4-(3,5-
	-2-ylaminomethyl			dimethyl)isoxaz
				olyl)
1186	tetrahydropyrimidin	1	н	NHSO2C6H4-(2-
	-2-ylaminomethyl			Br)
1187	tetrahydropyrimidin	1	Н	NHSO2C6H4-(3-
	-2-ylaminomethyl			Br)
1188	tetrahydropyrimidin	1	н	NHSO ₂ C ₆ H ₄ -(2-F)
	-2-ylaminomethyl			
1189	tetrahydropyrimidin	1	H .	$NHSO_2C_6H_4-(3-F)$
	-2-ylaminomethyl			
1190	tetrahydropyrimidin	1	Н	$NHSO_2C_6H_4 - (4-F)$
	-2-ylaminomethyl			
1191	tetrahydropyrimidin	1	н	NHSO ₂ (2-
	-2-ylaminomethyl			naphthyl)
1192	tetrahydropyrimidin	1	н	NHSO2 (1-
	-2-ylaminomethyl			naphthyl)
1193	tetrahydropyrimidin	1	Н	NHSO ₂ CH=CHPh
	-2-ylaminomethyl			
1194	tetrahydropyrimidin	1	н	NHSO ₂ CH ₂ Ph
	-2-ylaminomethyl			
1195	tetrahydropyrimidin	1	н	NHSO ₂ CH ₂ CH=CHPh
	-2-ylaminomethyl			
1196	tetrahydropyrimidin	1	Н	NHSO2-n-Bu
	-2-ylaminomethyl			
1197	tetrahydropyrimidin	1	Н	NHSO2-i-Bu
	-2-ylaminomethyl			
1198	imidazolin-2-yl-	1	Н	NHCOOBn
	aminomethyl			

1199	imidazolin-2-yl-	1	Н	NHCO2CH2C6H4-(2-	
	aminomethyl			CH ₃)	
1200	imidazolin-2-yl-	1	н	NHCO2CH2C6H4-(3-	
	aminomethyl			CH ₃)	
1201	imidazolin-2-yl-	1	н	NHCO2CH2C6H4-(4-	
	aminomethyl			CH ₃)	
1202	imidazolin-2-yl-	1	н	NHCO2CH2 (2-	
	aminomethyl			pyridinyl)	
1203	imidazolin-2-yl-	1	Н	NHCO2CH2 (3-	
•	aminomethyl			pyridinyl)	
1204	imidazolin-2-yl-	1	н	NHCO2CH2 (4-	
	aminomethyl		•	pyridinyl)	
1205	imidazolin-2-yl-	1	н	NHCO2CH2 (2-	
	aminomethyl			thiazolyl)	
1206	imidazolin-2-yl-	1	Н	NHCO2CH2 (4-	
	aminomethyl			thiazolyl)	
1207	imidazolin-2-yl-	1	Н	NHCO2CH2 (5-	
	aminomethyl			thiazolyl)	
1208	imidazolin-2-yl-	1	н	NHCO2CH2 (4-	
	aminomethyl			isoxazolyl)	
1209	imidazolin-2-yl-	1	Н	NHCO2CH2 (2-	
	aminomethyl			thienyl)	
1210	imidazolin-2-yl-	1	Н	NHCO2n-Bu	
	aminomethyl				
1211	imidazolin-2-yl-	1	Н	NHCO2i-Bu	
	aminomethyl				
1212	imidazolin-2-yl-	1	Н	NHCO2t-Bu	
	aminomethyl				
1213	imidazolin-2-yl-	1	Н	NHSO2Ph	507.3
	aminomethyl				
1214	imidazolin-2-yl-	1	н	NHSO ₂ C ₆ H ₄ -(2-	
	aminomethyl			CH3)	
1215	imidazolin-2-yl-	1	Н	NHSO ₂ C ₆ H ₄ - (3-	
	aminomethyl			CH3)	

1216	imidazolin-2-yl-	1	н	NHSO2C6H4-(4-
	aminomethyl			CH ₃)
1217	imidazolin-2-yl-	1	н	NHSO ₂ (2-pyridyl)
	aminomethyl			
1218	imidazolin-2-yl-	1	н	NHSO ₂ (3-pyridyl)
	aminomethyl			
1219	imidazolin-2-yl-	1	н	NHSO ₂ (4-pyridyl)
	aminomethyl			
1220	imidazolin-2-yl-	1	н	NHSO ₂ (2-thiaz-
	aminomethyl			olyl)
1221	imidazolin-2-yl-	1	н	NHSO2 (4-
	aminomethyl			isoxazolyl)
1222	imidazolin-2-yl-	1	Н	NHSO2-[4-(3,5-
	aminomethyl			dimethyl)isoxaz
				olyl
1223	imidazolin-2-yl-	1	Н	NHSO2C6H4-(2-
	aminomethyl			Br)
1224	imidazolin-2-yl-	1	H	NHSO2C6H4-(3-
	aminomethyl			Br)
1225	imidazolin-2-yl-	1	Н	$NHSO_2C_6H_4-(2-F)$
	aminomethyl			
1226	imidazolin-2-yl-	1	Н	$NHSO_2C_6H_4 - (3-F)$
	aminomethyl			
1227	imidazolin-2-yl-	1	н	NHSO ₂ C ₆ H ₄ -(4-F)
	aminomethyl			
1228	imidazolin-2-yl-	1	Н	NHSO2 (2-
	aminomethyl			naphthyl)
1229	imidazolin-2-yl-	1	Н	NHSO2 (1-
	aminomethyl			naphthyl)
1230	imidazolin-2-yl-	1	н	NHSO2CH=CHPh
	aminomethyl			
1231	imidazolin-2-yl-	1	H	NHSO2CH2Ph
	aminomethyl			
1232	imidazolin-2-yl-	1	н	NHSO ₂ CH ₂ CH=CHPh
	aminomethyl			

1233	imidazolin-2-yl-	1	Н	NHSO2-n-Bu
1234	aminomethyl imidazolin-2-yl-	1	Н	NHSO ₂ -i-Bu
	aminomethyl			
1235	benzimidazol-2-yl-	1	Н	NHSO ₂ Ph
	aminomethyl			
1236	benzimidazol-2-yl-	1	Н	NHSO ₂ C ₆ H ₄ -(2-
	aminomethyl			CH ₃)
1237	benzimidazol-2-yl-	1	н	NHSO2C6H4-(3-
	aminomethyl			CH ₃)
1238	benzimidazol-2-yl-	1	н	NHSO2C6H4-(4-
	aminomethyl			CH3)
1239	benzimidazol-2-yl-	1	Н	NHSO ₂ (2-pyridyl)
	aminomethyl			
1240	benzimidazol-2-yl-	1	н	NHSO ₂ (3-pyridyl)
	aminomethyl			
1241	benzimidazol-2-yl-	1	Н	NHSO ₂ (4-pyridyl)
	aminomethyl			
1242	benzimidazol-2-yl-	1	Н	NHSO2 (2-
	aminomethyl			thiazolyl)
1243	benzimidazol-2-yl-	1	н	NHSO ₂ (4-
	aminomethyl			isoxazolyl)
1244	benzimidazol-2-yl-	1	н	NHSO2-[4-(3,5-
	aminomethyl			dimethyl)isoxaz
				olyl]
1245	benzimidazol-2-yl-	1	н	NHSO2C6H4-(2-
	aminomethyl			Br)
1246	benzimidazol-2-yl-	1	Н	NHSO2C6H4-(3-
	aminomethyl			Br)
1247	benzimidazol-2-yl-	1	н	NHSO ₂ C ₆ H ₄ -(2-F)
	aminomethyl			
1248	benzimidazol-2-yl-	1	Н	NHSO ₂ C ₆ H ₄ -(3-F)
	aminomethyl			_
1249	benzimidazol-2-yl-	1	Н	NHSO ₂ C ₆ H ₄ - (4-F)
	aminomethyl			

1250	benzimidazol-2-yl-	1	н	NHCO2CH2Ph	
1051	aminomethyl	,	н	NHCO2n-Bu	
1251	benzimidazol-2-yl-	1	n	Micozii Du	
1252	aminomethyl	1	н	NHCO2i-Bu	
1252	benzimidazol-2-yl-	•	п	Micozi bu	
1050	aminomethyl 2-aminopyridin-6-	1	н	NHSO ₂ Ph	
1253	• •	1	n		
1054	ylmethyl	1	н	NHSO ₂ C ₆ H ₄ - (2-	
1254	2-aminopyridin-6-	1	n	CH3)	
	ylmethyl	1	н	NHSO ₂ C ₆ H ₄ -(3-	
1255	2-aminopyridin-6-	1	п	CH ₃)	
1056	ylmethyl	1	н	NHSO ₂ C ₆ H ₄ -(4-	
1256	2-aminopyridin-6-	1	ñ	CH3)	
1053	ylmethyl	1	н	NHSO ₂ (2-pyridyl)	
1257	2-aminopyridin-6-	1	п	M.DoZ(2 P)114117	
1050	ylmethyl	1	н	NHSO ₂ (3-pyridyl)	
1258	2-aminopyridin-6- ylmethyl	•	11		
1259	2-aminopyridin-6-	1	н	NHSO ₂ (4-pyridyl)	
1239	ylmethyl	•	••		
1260	2-aminopyridin-6-	1	н	NHSO ₂ (2-	
1260	ylmethyl	•	••	thiazolyl)	
1261	2-aminopyridin-6-	1	н	NHSO ₂ (4-	
1201	ylmethyl	•	••	isoxazolyl)	
1262		1	н	NHSO2-[4-(3,5-	535.1
1202	ylmethyl	•	••	dimethyl)isoxaz	
	y the chy i			olyl	
1263	2-aminopyridin-6-	1	н	NHSO2C6H4-(2-	
1203	ylmethyl	•		Br)	
1264		1	н	NHSO2C6H4-(3-	
1204	ylmethyl	•		Br)	
1265		1	н	NHSO ₂ C ₆ H ₄ -(2-F)	
1203	ylmethyl	•	••	<u>-</u> •	
1266	<u>-</u>	1	н	NHSO ₂ C ₆ H ₄ -(3-F)	
1200	ylmethyl	•	•••	. • • •	
	A TWECTIA T				

1267	2-aminopyridin-6-	1	H	$NHSO_2C_6H_4-(4-F)$	
	ylmethyl				
1268	2-aminopyridin-6-	1	н	NHCO2CH2Ph	
	ylmethyl				
1269	2-aminopyridin-6-	1	н	NHCO2n-Bu	
	ylmethyl				
1270	2-aminopyridin-6-	1	н	NHCO2i-Bu	
	ylmethyl				
1271	7-azabenimidazol-2-	1	н	NHSO ₂ Ph	
	yl				
1272	7-azabenimidazol-2-	1	н	NHSO2C6H4-(2-	
	уl			CH ₃)	
1273	7-azabenimidazol-2-	ļ	Н	NHSO2C6H4-(3-	
	уl			CH ₃)	
1274	7-azabenimidazol-2-	1	H	NHSO2C6H4-(4-	
	yl			CH ₃)	
1275	7-azabenimidazol-2-	1	H	NHSO ₂ (2-	
	yl			naphthyl)	
1276	7-azabenimidazol-2-	1	Н	NHSO ₂ (1-	
	уl			naphthyl)	
1277	7-azabenimidazol-2-	1	Н	NHSO ₂ (biphenyl)	
	yl				
1278	7-azabenimidazol-2-	1	Н	NHSO2C6H4-	569.4
	yl			(2,4,6-(CH ₃) ₃)	
1279	7-azabenimidazol-2-	1	Н	$NHSO_2(2-thienyl)$	
	yl				
1280	7-azabenimidazol-2-	1	Н	NHSO2-[4-(3,5-	
	yl			dimethyl)isoxaz	
				olyl)	
1281	7-azabenimidazol-2-	1	Н	NHSO2C6H4-(2-	
	yl			Br)	
1282	7-azabenimidazol-2-	1	Н	NHSO2C6H4-(3-	
	yl			Br)	
1283	7-azabenimidazol-2-	1	Н	$NHSO_2C_6H_4 - (2-F)$	
	yl				

1284	7-azabenimidazol-2-	1	н	NHSO ₂ C ₆ H ₄ -(3-F)	
1205	yl 7-azabenimidazol-2-	1	н	NHSO ₂ C ₆ H ₄ - (4-F)	
1285	yl	1	n		
1286	7-azabenimidazol-2-	1	н	NHCO2CH2Ph	
	y1				
1287	7-azabenimidazol-2-	1	н	NHCO2n-Bu	
	уl			•	
1288	7-azabenimidazol-2-	1	н	NHCO2i-Bu	
	yl				
1289	4,5,6,7-tetrahydro-	1	н	NHSO ₂ Ph	561.4
	benzimidazol-2-yl-				
	aminomethyl				
1290	4,5,6,7-tetrahydro-	1	н	NHSO ₂ C ₆ H ₄ -(2-	
	benzimidazol-2-yl-			CH ₃)	
	aminomethyl				
1291	4,5,6,7-tetrahydro-	1	H	NHSO ₂ C ₆ H ₄ -(3-	
	benzimidazol-2-yl-			CH3)	
	aminomethyl				
1292	4,5,6,7-tetrahydro-	1	Н	NHSO ₂ C ₆ H ₄ -(4-	
	benzimidazol-2-yl-			CH3)	
	aminomethyl				
1293	4,5,6,7-tetrahydro-	1	Н	NHSO ₂ (2-	
	benzimidazol-2-yl-			naphthyl)	
	aminomethyl				
1294	4,5,6,7-tetrahydro-	1	Н	NHSO ₂ (1-	
	benzimidazol-2-yl-			naphthyl)	
	aminomethyl				
1295	4,5,6,7-tetrahydro-	1	. Н	NHSO ₂ (biphenyl)	
	benzimidazol-2-yl-				
	aminomethyl				
1296	4,5,6,7-tetrahydro-	1	н	NHSO2C6H4-	
	benzimidazol-2-yl-			$(2,4,6-(CH_3)_3)$	
	aminomethyl				

1297	4,5,6,7-tetrahydro-	1.	н	NHSO ₂ (2-thienyl)	
	benzimidazol-2-yl-				
	aminomethyl				
1298	4,5,6,7-tetrahydro-	1	Н	NHSO ₂ -[4-(3,5-	
	benzimidazol-2-yl-			dimethyl)isoxaz	
	aminomethyl			olyl]	
1299	4,5,6,7-tetrahydro-	1	Н	NHSO2C6H4-(2-	
	benzimidazol-2-yl-			Br)	
	aminomethyl				
1300	4,5,6,7-tetrahydro-	1	Н	NHSO2C6H4-(3-	•
	benzimidazol-2-yl-			Br)	
	aminomethyl				
1301	4,5,6,7-tetrahydro-	1	Н	NHSO2C6H4-(2-F)	
	benzimidazol-2-yl-				
	aminomethyl				
1302	4,5,6,7-tetrahydro-	1	Н	$NHSO_2C_6H_4 - (3-F)$	
	benzimidazol-2-yl-				
	aminomethyl				
1303	4,5,6,7-tetrahydro-	1	Н	$NHSO_2C_6H_4 - (4-F)$	
	benzimidazol-2-yl-				
	aminomethyl				
1304	4,5,6,7-tetrahydro-	1	Н	NHCO2CH2Ph	
	benzimidazol-2-yl-				
	aminomethyl				
1305	4,5,6,7-tetrahydro-	1	Н	NHCO2n-Bu	
	benzimidazol-2-yl-				
	aminomethyl				
1306	4,5,6,7-tetrahydro-	1	Н	NHCO2i-Bu	
	benzimidazol-2-yl-				
	aminomethyl				
1307	4-oxo-3,4,5,6-	1	Н	NHSO ₂ Ph	549.3
	tetrahydro-				
	pyrimidin-2-yl-				
	aminomethyl				

1308	4-oxo-3,4,5,6-	1	H	NHSO ₂ C ₆ H ₄ -(2-
1300	tetrahydro-	•	••	CH ₃)
	pyrimidin-2-yl-			3.
	aminomethyl			
1309	4-oxo-3,4,5,6-	1	н	NHSO ₂ C ₆ H ₄ -(3-
2202	tetrahydro-	-		CH ₃)
	pyrimidin-2-yl-			-
	aminomethyl			
1310	4-oxo-3,4,5,6-	1	н	NHSO ₂ C ₆ H ₄ -(4-
	tetrahydro-	-	••	CH ₃)
	pyrimidin-2-yl-			•
	aminomethyl	•		
1311	4-oxo-3,4,5,6-	1	Н	NHSO ₂ (2-
	tetrahydro-			naphthyl)
	pyrimidin-2-yl-			
	aminomethyl			
1312	4-oxo-3,4,5,6-	1	Н	NHSO2 (1-
	tetrahydro-			naphthyl)
	pyrimidin-2-yl-			
	aminomethyl			
1313	4-oxo-3,4,5,6-	1	н	NHSO ₂ (biphenyl)
	tetrahydro-			
	pyrimidin-2-yl-			
	aminomethyl			
1314	4-oxo-3,4,5,6-	1	н	NHSO2C6H4-
	tetrahydro-			$(2,4,6-(CH_3)_3)$
	pyrimidin-2-yl-			
	aminomethyl			
1315	4-oxo-3,4,5,6-	1	н	NHSO ₂ (2-thienyl)
	tetrahydro-			
	pyrimidin-2-yl-			
	aminomethyl			

1316	4-oxo-3,4,5,6-	1	н	NHSO2-[4-(3,5-
	tetrahydro-			dimethyl)isoxaz
	pyrimidin-2-yl-			oly1}
	aminomethyl			
1317	4-oxo-3,4,5,6-	1	н	NHSO2C6H4-(2-
	tetrahydro-			Br)
	pyrimidin-2-yl-			
	aminomethyl			
1318	4-oxo-3,4,5,6-	1	н	NHSO2C6H4-(3-
	tetrahydro-			Br)
	pyrimidin-2-yl-			
	aminomethyl			
1319	4-oxo-3,4,5,6-	1	Н	NHSO ₂ C ₆ H ₄ -(2-F)
	tetrahydro-			
	pyrimidin-2-yl-			
	aminomethyl			
1320	4-oxo-3,4,5,6-	1	Н	NHSO ₂ C ₆ H ₄ -(3-F)
	tetrahydro-			
	pyrimidin-2-yl-			
	aminomethyl			
1321	4-oxo-3,4,5,6-	1	Н	NHSO ₂ C ₆ H ₄ -(4-F)
	tetrahydro-			
	pyrimidin-2-yl-			
	aminomethyl			
1322	4-oxo-3,4,5,6-	1	Н	NHCO2CH2Ph
	tetrahydro-			
	pyrimidin-2-yl-			
	aminomethyl			
1323	4-oxo-3,4,5,6-	1	н	NHCO2n-Bu
	tetrahydro-			
	pyrimidin-2-yl-			
	aminomethyl			

1324	4-oxo-3,4,5,6-	1	Н	NHCO2i-Bu
	tetrahydro-			
	pyrimidin-2-yl-			
	aminomethyl			
1325	2-iminoazepin-7-	1	Н	NHSO ₂ Ph
	ylmethyl			
1326	1,2-pyrazol-3-		Н	NHSO ₂ Ph
	ylaminomethyl			
1327	1,2,4-triazol-5-	1	н	NHSO ₂ Ph
	ylaminomethyl			
1328	imidazol-4-	1	н	NHSO ₂ Ph
	_ylaminomethyl			
1329	1,3,4-oxadiazol-	1	н	NHSO ₂ Ph
	2ylaminomethyl			
1330	1,2,4-thiadiazol-5-	1	н	NHSO ₂ Ph
	ylaminomethyl			
1331	1.2.5-oxadiazol-3-	1	н	NHSO ₂ Ph
	ylaminomethyl			
1332	1.2.4-oxadiazol-5-	1	Н	NHSO2Ph
	ylaminomethyl			
1333	2-iminoazepin-7-	1	н	NHSO ₂ (4-
	ylmethyl			isoxazolyl)
1334	1,2-pyrazol-3-	1	н	NHSO ₂ (4-
	ylaminomethyl			isoxazolyl)
1335	1,2,4-triazol-5-	1	н	NHSO ₂ (4-
	ylaminomethyl			isoxazolyl)
1336	imidazol-4-	1	н	NHSO2 (4-
	ylaminomethyl			isoxazolyl)
1337	1,3,4-oxadiazol-	1	н	NHSO2 (4-
	2ylaminomethyl			isoxazolyl)
1338	1,2,4-thiadiazol-5-	1	Н	NHSO2 (4-
	ylaminomethyl			isoxazolyl)
1339	1.2.5-oxadiazol-3-	1	н	NHSO2 (4-
	ylaminomethyl			isoxazolyl)

134	0 1.2.4-oxadiazol-5-	1	н	NHSO2 (4-
	ylaminomethyl			isoxazolyl)
134	1 2-iminoazepin-7-	1	н	NHSO ₂ -[4-(3,5-
	ylmethyl			dimethyl)isoxaz
				olylj
1342	2 1,2-pyrazol-3-	1	н	NHSO2-[4-(3,5-
	ylaminomethyl			dimethyl)isoxaz
				olyl
1343	1,2,4-triazol-5-	1	н	NHSO2-[4-(3,5-
	ylaminomethyl			dimethyl)isoxaz
				olyl
1344	imidazol-4-	1	Н	NHSO2-[4-(3,5-
	ylaminomethyl			dimethyl)isoxaz
				olyl)
1345	-,-,-	1	н	NHSO2-[4-(3,5-
	2ylaminomethyl			dimethyl)isoxaz
				olyl)
1346	1,2,4-thiadiazol-5-	1	Н	NHSO2-[4-(3,5-
	ylaminomethyl			dimethyl)isoxaz
				olyl)
1347	1.2.5-oxadiazo1-3-	1	Н	NHSO ₂ -[4-(3,5-
	ylaminomethyl			dimethyl)isoxaz
				olyl
1348	1.2.4-oxadiazo1-5-	1	H	NHSO ₂ -[4-(3,5-
	ylaminomethyl			dimethyl)isoxaz
			•	olylj
1349	imidazol-2-yl-	1	3-pyridinyl	Н
	aminomethyl			
1350	pyridin-2-	1	3-pyridinyl	н
	ylaminomethyl			
1351	imidazolin-2-yl-	1	3-pyridinyl	н
	aminomethyl			
1352	tetrahydropyrimidin	1	3-pyridinyl	Н
	-2-ylaminomethyl			

1353	benzimidazol-2-yl-	1	3-pyridinyl	Н
1000	aminomethyl			
1354	2-aminopyridin-6-	1	3-pyridinyl	Н
	ylmethyl			
1355	2-iminoazepin-7-	1	3-pyridinyl	Н
	ylmethyl			
1356	1,2-pyrazol-3-	1	3-pyridinyl	Н
	ylaminomethyl			
1357	1,2,4-triazol-5-	1	3-pyridinyl	н
	ylaminomethyl			
1358	imidazol-4-	1	3-pyridinyl	Н
	ylaminomethyl			
1359	1,3,4-oxadiazol-	1	3-pyridinyl	Н
	2ylaminomethyl			
1360	1,2,4-thiadiazol-5-	1	3-pyridinyl	Н
	ylaminomethyl			
1361	1.2.5-oxadiazol-3-	1	3-pyridinyl	Н
	ylaminomethyl			
1362	1.2.4-oxadiazol-5-	1	3-pyridinyl	н
	ylaminomethyl			
1363	imidazol-2-yl-	1	(3,4-	Н
	aminomethyl		methylene-	
			dioxy)phenyl	
1364	pyridin-2-	1	(3,4-	н
	ylaminomethyl		methylene-	
			dioxy)phenyl	
1365		1	(3,4-	Н
	aminomethyl		methylene-	
			dioxy)phenyl	.,
1366	•	1	(3,4-	н
	-2-ylaminomethyl		methylene-	
		_	dioxy)phenyl	,,
1367		1	(3,4-	н
	aminomethy1		methylene-	
			dioxy)phenyl	

1368	2-aminopyridin-6-	1	(3,4-	н
	ylmethyl		methylene-	
	• -		dioxy)phenyl	
1369	2-iminoazepin-7-	1	(3,4-	н
	ylmethyl		methylene-	
			dioxy)phenyl	
1370	1,2-pyrazol-3-	1	(3,4-	н
	ylaminomethyl		methylene-	
			dioxy)phenyl	
1371	1,2,4-triazol-5-	1	(3,4-	н
	ylaminomethyl		methylene-	
			dioxy)phenyl	
1372	imidazol-4-	1	(3,4-	Н
	ylaminomethyl		methylene-	
			dioxy)phenyl	
1373	1,3,4-oxadiazol-	1	(3,4-	Н
	2ylaminomethyl		methylene-	
			dioxy)phenyl	
1374	1,2,4-thiadiazol-5-	1	(3,4-	н
	ylaminomethyl		methylene-	
			dioxy)phenyl	
1375	1,2,5-oxadiazol-3-	1	(3,4-	Н
	ylaminomethyl		methylene-	
			dioxy)phenyl	
1376	1.2.4-oxadiazo1-5-	1	(3,4-	Н
	ylaminomethyl		methylene-	
			dioxy)phenyl	
1377	imidazol-2-yl-	1	3-pyridinyl	NHSO2Ph
	aminomethyl			
1378	pyridin-2-	1	3-pyridinyl	NHSO2Ph
	ylaminomethyl			
1379	imidazol-2-yl-	1	(3,4-	NHSO2Ph
	aminomethyl		methylene-	
			dioxy)phenyl	

methylene-dioxy)phenyl 1381 imidazol-2-yl-amino 1 H NHSO2P 1382 pyridin-2-ylamino 1 H NHSO2P	h
1381 imidazol-2-yl-amino 1 H NHSO ₂ P 1382 pyridin-2-ylamino 1 H NHSO ₂ P	h
1382 pyridin-2-ylamino 1 H NHSO ₂ P	h
	h
1383 imidazolin-2-yl- 1 H NHSO ₂ P	
amino	
1384 tetrahydropyrimidin 1 H NHSO ₂ P	h
-2-ylamino	
1385 benzimidazol-2-yl- 1 H NHSO ₂ P	h
amino	
1386 2-aminopyridin-6- 1 H NHSO ₂ P	h
ylmethyl	
1387 2-iminoazepin-7-yl 1 H NHSO ₂ P	h
1388 1,2-pyrazol-3- 1 H NHSO ₂ P	h
ylamino	
1389 1,2,4-triazol-5- 1 H NHSO ₂ P	h
ylamino	
1390 imidazol-4-ylamino 1 H NHSO ₂ P	h
1391 1,3,4-oxadiazol- 1 H NHSO ₂ P	'n
2ylaminomethyl	
1392 1,2,4-thiadiazol-5- 1 H NHSO ₂ P	'n
ylaminomethyl	
1393 1.2.5-oxadiazol-3- 1 H NHSO ₂ P	h
ylaminomethyl	
1394 1.2.4-oxadiazol-5- 1 H NHSO ₂ F	'n
ylaminomethyl	
1395 imidazol-2-yl- 1 H NHSO ₂ F	'n
aminoethyl	
1396 pyridin-2- 1 H NHSO ₂ F	h'
ylaminoethyl	
1397 imidazolin-2-yl- 1 H NHSO ₂ E	?h
aminoethyl	
1398 tetrahydropyrimidin 1 H NHSO ₂ N	?h
-2-ylaminoethyl	

1399	benzimidazol-2-yl- aminoethyl	1	Н	NHSO ₂ Ph
1400	2-aminopyridin-6-	1	н	NHSO ₂ Ph
1401	ylethyl 2-iminoazepin-7-	1	н	NHSO ₂ Ph
1402	ylethyl 1,2-pyrazol-3-	1	н	NHSO ₂ Ph
1403	ylaminoethyl 1,2,4-triazol-5-	1	н	NHSO ₂ Ph
1404	ylaminoethyl imidazol-4-	1	н	NHSO ₂ Ph
1405	ylaminoethyl 1,3,4-oxadiazol-	1	н	NHSO ₂ Ph
	2ylaminoethyl			_
1406	1,2,4-thiadiazol-5- ylaminoethyl	1	Н	NHSO ₂ Ph
1407	1,2,5-oxadiazol-3- ylaminoethyl	1	н	NHSO ₂ Ph
1408	1,2,4-oxadiazol-5- ylaminoethyl	1	Н	NHSO ₂ Ph
1409	imidazol-2-yl- aminomethyl	2	н	NHSO ₂ Ph
1410	pyridin-2- ylaminomethyl	2	Н	NHSO ₂ Ph
1411	imidazolin-2-yl- aminomethyl	2	н	NHSO ₂ Ph
1412	tetrahydropyrimidin -2-ylaminomethyl	2	Н	NHSO ₂ Ph
1413	benzimidazol-2-yl- aminomethyl	2	н	NHSO ₂ Ph
1414	7-azabenimidazol-2-	2	н	NHSO ₂ Ph
1415	yl 4,5,6,7-tetrahydro-	2	н	NHSO ₂ Ph
	benzimidazo1-2-y1- aminomethyl			

1416	4-oxotetrahydro-	2	н	NHSO2Ph
	pyrimidin-2-yl-			
	aminomethyl			
1417	2-aminopyridin-6-	2	н	NHSO2Ph
	ylmethyl			
1418	2-iminoazepin-7-	2	н	NHSO2Ph
	ylmethyl			
1419	1,2-pyrazol-3-	2	н	NHSO2Ph
	ylaminomethyl			
1420	1,2,4-triazol-5-	2	Н	NHSO2Ph
	ylaminomethyl			
1421	imidazol-4-	2	Н	NHSO ₂ Ph
	ylaminomethyl			
1422	1,3,4-oxadiazol-	2	н	NHSO ₂ Ph
	2ylaminomethyl			
1423	1,2,4-thiadiazol-5-	2	н	NHSO2Ph
	ylaminomethyl			
1424	1.2.5-oxadiazol-3-	2	Н	NHSO ₂ Ph
	ylaminomethyl			
1425	1.2.4-oxadiazol-5-	2	н	NHSO ₂ Ph
	ylaminomethyl			
1426	imidazol-2-yl-	0	н	NHSO ₂ Ph
	aminomethyl			
1427	pyridin-2-	0	н	NHSO ₂ Ph
	ylaminomethyl			
1428	imidazolin-2-yl-	0	H	NHSO ₂ Ph
	aminomethyl			
1429	tetrahydropyrimidin	0	н	NHSO ₂ Ph
	-2-ylaminomethyl			
1430	benzimidazol-2-yl-	0	н	NHSO ₂ Ph
	aminomethyl			
1431	7-azabenimidazol-2-	0	н	NHSO ₂ Ph
	yl			

1432	4,5,6,7-tetrahydro-	0	н	NHSO2Ph	
	benzimidazol-2-yl-				
	aminomethyl-				
1433	4-oxotetrahydro-	0	H	NHSO ₂ Ph	
	pyrimidin-2-yl-				
	aminomethyl				
1434	2-aminopyridin-6-	0	н	NHSO2Ph	
	ylmethyl				
1435	2-iminoazepin-7-	0	н	NHSO2Ph	
	ylmethyl				
1436	1,2-pyrazol-3-	0	Н	NHSO2Ph	
	ylaminomethyl				
1437	1,2,4-triazol-5-	0	н	NHSO ₂ Ph	
	ylaminomethyl				
1438	imidazol-4-	0	н	NHSO2Ph	
	ylaminomethyl				
1439	1,3,4-oxadiazol-	0	н	NHSO2Ph	
	2ylaminomethyl				
1440	1,2,4-thiadiazol-5-	0	н	NHSO ₂ Ph	
	ylaminomethyl				
1441	1,2,5-oxadiazol-3-	0	н	NHSO ₂ Ph	
	ylaminomethyl				
1442	1.2.4-oxadiazol-5-	0	н	NHSO2Ph	
	ylaminomethyl				
1443	benzimidazol-2-	1	Н	NHSO2 (2,4,6-	597.4
	ylaminomethyl			trimethyl	
				phenyl)	
1444	2-	1	, н	NHSO2 (2,4,6-	608.5
	quinolinylaminometh			trimethyl	
	yl			phenyl)	
1445	benzimidazol-2-	1	Н	NHSO2(2,4,6-	611.3
	ylaminocarbonyl			trimethyl	
				phenyl)	

1446	benzimidazol-2-yl	1	н	NHSO ₂ (2,4,6-	568.5
				trimethyl	
				phenyl)	
1447	imidazol-2-	1	н	NHSO2 (2,4,6-	561.4
	ylaminocarbonyl			trimethyl	
				phenyl)	
1448	imidazol-2-	1	н	NHSO ₂ (2-	569.2
	ylaminocarbonyl			naphthyl)	
1449	imidazol-2-	1	н	NHSO2(2,6-	587.3/
	ylaminocarbonyl			dichlorophenyl)	589.4
1450	pyridin-2-	1	Н	NHSO2 (2,4,6-	547.3
	ylaminomethyl			trimethyl	
				phenyl)	
1451	imidazol-2-	1	н	NHSO2(2,4,6-	547.2
	ylaminomethyl			trimethyl	
				phenyl)	
1452	imidazol-2-	1	н	$NHSO_2$ biphenyl	581.2
	ylaminomethyl				
1453	imidazol-2-	1	н	NHSO ₂ [(2,6-	649.1
	ylaminomethyl			dichloro-4-	
				phenyl)phenyl)	
1454	imidazol-2-	1	Н	$NHSO_2[(2,6-$	609.2
	ylaminomethyl			dimethyl-4-	
				phenyl)phenyl]	
1455	imidazol-2-	1	н	NHSO2(2,6-	533.2
	ylaminomethyl			dimethylphenyl)	
1456	imidazol-2-	1	Н	NHSO2(2-chloro-	553.2
	ylaminomethyl			6-methylphenyl)	
1457	imidazol-2-	1	н	NHSO2(2,6-	573.1
	ylaminomethyl			dichlorophenyl)	

Table 2

Rla R14 R15 Ex. MS Nο. 2001 2-aminopyridin-6-yl 0 Н Н NHCO2Bn 2002 2-aminopyridin-6-yl н $NHCO_2CH_2C_6H_4 - (2-CH_3)$ 2003 2-aminopyridin-6-yl Н 2004 2-aminopyridin-6-yl $NHCO_2CH_2C_6H_4 - (3-CH_3)$ Н NHCO2CH2C6H4-(4-CH3) 2005 2-aminopyridin-6-yl Н NHCO2CH2 (2-2006 2-aminopyridin-6-yl 0 Н pyridinyl) 2007 2-aminopyridin-6-yl 0 Н NHCO2CH2 (3pyridinyl) NHCO2CH2 (4-2008 2-aminopyridin-6-yl 0 Н pyridinyl) 2009 2-aminopyridin-6-yl 0 NHCO2CH2 (2н thiazolyl) NHCO2CH2 (4-2010 2-aminopyridin-6-yl 0 Н thiazolyl) 2011 2-aminopyridin-6-yl 0 NHCO2CH2 (5н thiazolyl) 2012 2-aminopyridin-6-yl 0 NHCO2CH2 (4-Н isoxazolyl) NHCO2CH2 (2-thienyl) 2013 2-aminopyridin-6-yl Н 2014 2-aminopyridin-6-yl 0 NHCO2CH2 (5-Н isoxazolyl) 2015 2-aminopyridin-6-yl 0 NHCO2n-Bu Н 2016 2-aminopyridin-6-yl 0 NHCO2i-Bu Н

```
2017 2-aminopyridin-6-yl
                                                 NHCO2t-Bu
                                    Н
2018 2-aminopyridin-6-yl
                                    Н
                                                 NHCOCH<sub>2</sub>Ph
                                           NHCOCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub> - (2-CH<sub>3</sub>)
2019 2-aminopyridin-6-yl
                              0
                                    Н
                                           NHCOCH_2C_6H_4 - (3-CH_3)
2020 2-aminopyridin-6-yl
                                    н
                              0
                                           NHCOCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub> - (4-CH<sub>3</sub>)
2021 2-aminopyridin-6-yl
                              O
                                    Н
                                               NHCO (CH2) 2Ph
2022 2-aminopyridin-6-yl
                              0
                                     н
2023 2-aminopyridin-6-yl
                                                 NHCOn-Bu
                              0
                                     Н
2024 2-aminopyridin-6-yl
                               0
                                     Н
                                                 NHCOt-Bu
                                                  NHSO2Ph
2025 2-aminopyridin-6-yl
                               0
                                            NHSO2C6H4-(2-CH3)
2026 2-aminopyridin-6-yl
                               0
                                     н
                                            NHSO_2C_6H_4 - (3-CH_3)
2027 2-aminopyridin-6-yl
                                            NHSO2C6H4-(4-CH3)
2028 2-aminopyridin-6-yl
                               0
                                     Н
2029 2-aminopyridin-6-yl
                               0
                                     Н
                                             NHSO<sub>2</sub> (2-pyridyl)
                                             NHSO<sub>2</sub> (3-pyridyl)
2030 2-aminopyridin-6-yl
                               0
                                     Н
                                             NHSO<sub>2</sub> (4-pyridyl)
2031 2-aminopyridin-6-yl
                                           NHSO2 (2-thiaz-olyl)
2032 2-aminopyridin-6-yl
                                     Н
                                            NHSO<sub>2</sub>(3-thiazolyl)
2033 2-aminopyridin-6-yl 0
                                     Н
                                            NHSO2 (4-isoxazolyl)
2034 2-aminopyridin-6-yl
                               0
                                     Н
                                               NHSO<sub>2</sub>[4-(3,5-
2035 2-aminopyridin-6-yl
                                           dimethyl) isoxazolyl]
                                             NHSO_2C_6H_4 - (2-Br)
2036 2-aminopyridin-6-yl
                               0
                                     Н
                                             NHSO_2C_6H_4-(3-Br)
2037 2-aminopyridin-6-yl
                               0
                                     Н
                                             NHSO_2C_6H_4-(4-Br)
2038 2-aminopyridin-6-yl
                               0
                                     н
                                              NHSO2C6H4-(2-F)
2039 2-aminopyridin-6-yl
                               0
                                     н
                                              NHSO_2C_6H_4 - (3-F)
2040 2-aminopyridin-6-yl
                               0
                                     Н
                                              NHSO_2C_6H_4 - (4-F)
2041 2-aminopyridin-6-yl
                                     н
                                             NHSO2 (2-naphthy1)
2042 2-aminopyridin-6-yl
                               0
                                     н
                                             NHSO2 (1-naphthyl)
2043 2-aminopyridin-6-yl
                               0
                                     н
                                                NHSO2CH=CHPh
2044 2-aminopyridin-6-yl
                               0
                                     н
                                                 NHSO2CH2Ph
2045 2-aminopyridin-6-yl
                               0
                                     Н
                                              NHSO2CH2CH=CH-Ph
2046 2-aminopyridin-6-yl
                                     Н
                                                 NHSO2-n-Bu
2047 2-aminopyridin-6-yl
                                     Н
2048 2-aminopyridin-6-yl
                                                 NHSO2-i-Bu
                                      Н
                                                 NHSO2-t-Bu
2049 2-aminopyridin-6-yl
                                      н
                                                  NHSO2NHPh
2050 2-aminopyridin-6-yl
                                      Н
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2051 2-aminopyridin-6-yl
                                   Н
                                         NHSO2NHC6H4-(2-CH3)
 2052 2-aminopyridin-6-yl
                                   Н
                                         NHSO2NHC6H4-(3-CH3)
 2053 2-aminopyridin-6-yl
                                         NHSO2NHC6H4~(4-CH3)
                                   Н
 2054 2-aminopyridin-6-yl
                                         NHSO2NH(2-pyridyl)
                                   Н
 2055 2-aminopyridin-6-yl
                             0
                                         NHSO2NH(3-pyridy1)
                                   н
 2056 2-aminopyridin-6-yl
                                         NHSO2NH(4-pyridyl)
                             0
                                   н
 2057 2-aminopyridin-6-yl
                                        NHSO2NH(2-thiazolyl)
                                   Н
 2058 2-aminopyridin-6-yl
                                        NHSO2NH(4-thiazoly1)
                                   H
 2059 2-aminopyridin-6-yl
                                             NHSO2NH(4-
                                   Н
                                             isoxazolyl)
2060 2-aminopyridin-6-yl
                                           NHSO<sub>2</sub>[4-(3,5-
                                  Н
                                        dimethyl)isoxazolyl]
2061 2-aminopyridin-6-yl
                                  Н
                                         NHSO2NHC6H4-(2-Br)
2062 2-aminopyridin-6-yl
                                  Н
                                         NHSO_2NHC_6H_4 - (3-Br)
2063 2-aminopyridin-6-yl
                                         NHSO2NHC6H4-(4-Br)
                                  н
2064 2-aminopyridin-6-yl
                                         NHSO_2NHC_6H_4-(3-F)
                                  Н
2065 2-aminopyridin-6-yl
                                         NHSO2NHC6H4-(4-F)
                                  Н
2066 2-aminopyridin-6-yl
                                  Н
                                        NHSO2NH(2-naphthy1)
2067 2-aminopyridin-6-yl
                                  Н
                                        NHSO2NH(1-naphthyl)
2068 2-aminopyridin-6-yl
                                  Н
                                          NHSO2NHCH=CH-Ph
2069 2-aminopyridin-6-yl
                                  Н
                                            NHSO2NHCH2Ph
2070 2-aminopyridin-6-yl
                            0
                                        NHSO2NHCH2CH=CH-Ph
                                  Н
2071 2-aminopyridin-6-yl
                                  Н
                                            NHSO2NH-n-Bu
2072 2-aminopyridin-6-yl
                            0
                                  Н
                                           NHSO2NH-i-Bu
2073 2-aminopyridin-6-yl
                            0
                                  Н
                                           NHSO2NH-t-Bu
2074 2-aminopyridin-6-yl
                            1
                                  Н
                                              NHCO<sub>2</sub>Bn
                                                               497.2
2075 2-aminopyridin-6-yl
                            1
                                  Н
                                       NHCO2CH2C6H4-(2-CH3)
2076 2-aminopyridin-6-yl
                            1
                                       NHCO_2CH_2C_6H_4 - (3-CH_3)
                                  Н
2077 2-aminopyridin-6-yl
                                  Н
                                       NHCO2CH2C6H4-(4-CH3)
2078 2-aminopyridin-6-yl 1
                                  Н
                                            NHCO2CH2 (2-
                                            pyridinyl)
2079 2-aminopyridin-6-yl 1
                                 Н
                                            NHCO2CH2 (3-
                                            pyridinyl)
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NHCO2CH2 (4-
2080 2-aminopyridin-6-yl 1
                                               pyridinyl)
                                               NHCO2CH2 (2-
2081 2-aminopyridin-6-yl 1
                                    Н
                                               thiazolyl)
                                               NHCO2CH2 (4-
2082 2-aminopyridin-6-yl 1
                                    Н
                                                thiazolyl)
                                               NHCO2CH2 (5-
2083 2-aminopyridin-6-yl 1
                                    Н
                                                thiazolyl)
                                               NHCO2CH2 (4-
2084 2-aminopyridin-6-yl 1
                                    Н
                                               isoxazoly1)
                                           NHCO2CH2 (2-thienyl)
2085 2-aminopyridin-6-yl 1
                                    Н
                                                NHCO2n-Bu
2086 2-aminopyridin-6-yl
                                                NHCO2i-Bu
2087 2-aminopyridin-6-yl 1
                                                 NHCO2t-Bu
2088 2-aminopyridin-6-yl 1
                                                 NHCOCH<sub>2</sub>Ph
2089 2-aminopyridin-6-yl 1
                                           NHCOCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>-(2-CH<sub>3</sub>)
2090 2-aminopyridin-6-yl 1
                                     н
                                           NHCOCH2-C6H4-(3-CH3)
2091 2-aminopyridin-6-yl 1
                                     Н
                                           NHCOCH2C6H4-(4-CH3)
                                     Н
2092 2-aminopyridin-6-yl 1
                                           NHCOCH<sub>2</sub> (2-pyridinyl)
                                     Н
2093 2-aminopyridin-6-yl 1
                                           NHCOCH<sub>2</sub> (3-pyridinyl)
                                     Н
2094 2-aminopyridin-6-yl 1
                                           NHCOCH<sub>2</sub> (4-pyridinyl)
                                     н
2095 2-aminopyridin-6-yl 1
                                           NHCOCH2 (2-thiazoly1)
                              1
                                     Н
2096 2-aminopyridin-6-yl
                                           NHCOCH2 (4-thiazoly1)
                                     Н
2097 2-aminopyridin-6-yl 1
                                           NHCOCH<sub>2</sub> (5-thiazolyl)
                                     Н
2098 2-aminopyridin-6-yl
                                                 NHCOCH2 (4-
                                      Н
2099 2-aminopyridin-6-yl
                                                isoxazolyl)
                                            NHCOCH2 (2-thieny1)
2100 2-aminopyridin-6-yl
                                      Н
                                                  NHCOn-Bu
 2101 2-aminopyridin-6-yl
                                      Н
                                                  NHCOt-Bu
 2102 2-aminopyridin-6-yl
                                      Н
                                                   NHSO<sub>2</sub>Ph
 2103 2-aminopyridin-6-yl
                               1
                                      Н
                                             NHSO_2C_6H_4 - (2-CH_3)
 2104 2-aminopyridin-6-yl 1
                                      Н
                                             NHSO_2C_6H_4 - (3-CH_3)
                                      Н
 2105 2-aminopyridin-6-yl
                                             NHSO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>-(4-CH<sub>3</sub>)
 2106 2-aminopyridin-6-yl
                                              NHSO2(2-pyridyl)
                                      Н
 2107 2-aminopyridin-6-yl
```

```
2108 2-aminopyridin-6-yl 1
                                    н
                                            NHSO<sub>2</sub>(3-pyridyl)
 2109 2-aminopyridin-6-yl
                                    Н
                                            NHSO<sub>2</sub>(4-pyridyl)
 2110 2-aminopyridin-6-yl 1
                                           NHSO2 (2-thiazoly1)
                                    Н
 2111 2-aminopyridin-6-yl 1
                                           NHSO<sub>2</sub>(4-thiazolyl)
                                    Н
 2112 2-aminopyridin-6-yl 1
                                          NHSO<sub>2</sub> (4-isoxazolyl)
                                    Н
 2113 2-aminopyridin-6-yl 1
                                             NHSO2-[4-(3,5-
                                    Н
                                         dimethyl)isoxazolyl)
 2114 2-aminopyridin-6-yl 1
                                    Н
                                           NHSO_2C_6H_4 - (2-Br)
 2115 2-aminopyridin-6-yl 1
                                           NHSO2C6H4-(3-Br)
                                    Н
 2116 2-aminopyridin-6-yl 1
                                           NHSO_2C_6H_4-(4-Br)
                                    Н
 2117 2-aminopyridin-6-yl 1
                                    Н
                                            NHSO2C6H4-(2-F)
 2118 2-aminopyridin-6-yl 1
                                    н
                                            NHSO_2C_6H_4 - (3-F)
 2119 2-aminopyridin-6-yl 1
                                    Н
                                            NHSO2C6H4-(4-F)
 2120 2-aminopyridin-6-yl 1
                                    Н
                                           NHSO_2(2-naphthyl)
 2121 2-aminopyridin-6-yl 1
                                           NHSO<sub>2</sub>(1-naphthyl)
                                    Н
 2122 2-aminopyridin-6-yl 1
                                             NHSO2CH=CH-Ph
                                    Н
 2123 2-aminopyridin-6-yl 1
                                               NHSO2CH2Ph
                                    Н
 2124 2-aminopyridin-6-yl
                                           NHSO2-CH2CH=CH-Ph
                              1
                                   Н
 2125 2-aminopyridin-6-yl 1
                                    Н
                                              NHSO2-n-Bu
 2126 2-aminopyridin-6-yl 1
                                              NHSO2-i-Bu
                                   Н
 2127 2-aminopyridin-6-yl 1
                                              NHSO2-t-Bu
                                   Н
 2128 2-aminopyridin-6-yl 1
                                   Н
                                               NHSO2NHPh
2129 2-aminopyridin-6-yl 1
                                   Н
                                         NHSO2NHC6H4-(2-CH3)
 2130 2-aminopyridin-6-yl 1
                                         NHSO_2NHC_6H_4-(3-CH_3)
 2131 2-aminopyridin-6-yl 1
                                   Н
                                         NHSO2NHC6H4-(4-CH3)
 2132 2-aminopyridin-6-yl 1
                                          NHSO<sub>2</sub>NH(2-pyridyl)
 2133 2-aminopyridin-6-yl 1
                                   Н
                                          NHSO<sub>2</sub>NH(3-pyridyl)
 2134 2-aminopyridin-6-yl 1
                                   Н
                                          NHSO<sub>2</sub>NH(4-pyridyl)
 2135 2-aminopyridin-6-yl 1
                                         NHSO2NH(2-thiazoly1)
                                   Н
 2136 2-aminopyridin-6-yl 1
                                              NHSO2NH- (4-
                                              thiazolyl)
 2137 2-aminopyridin-6-yl 1
                                   Н
                                              NHSO2NH (4-
                                              isoxazolyl)
```

2138	2-aminopyridin-6-yl	1	н	NHSO2-(4-(3,5-
				dimethyl)isoxazolyl]
2139	2-aminopyridin-6-yl	1	Н	$NHSO_2NHC_6H_4-(2-Br)$
2140	2-aminopyridin-6-yl	1	Н	$NHSO_2NHC_6H_4-(3-Br)$
2141	2-aminopyridin-6-yl	1	Н	$NHSO_2NHC_6H_4-(4-Br)$
2142	2-aminopyridin-6-yl	1	Н	$NHSO_2NHC_6H_4-(3-F)$
2143	2-aminopyridin-6-yl	1	н	$NHSO_2NHC_6H_4-(4-F)$
2144	2-aminopyridin-6-yl	1	н	NHSO ₂ NH(2-naphthy1)
2145	2-aminopyridin-6-yl	1	н	NHSO ₂ NH)1-naphthyl)
2146	2-aminopyridin-6-yl	1	Н	NHSO2NHCH=CH-Ph
2147	2-aminopyridin-6-yl	1	н	NHSO2NHCH2Ph
2148	2-aminopyridin-6-yl	1	н	NHSO2NHCH2CH=CH-Ph
2149	2-aminopyridin-6-yl	1	н	NHSO2NH-n-Bu
2150	2-aminopyridin-6-yl	1	Н	NHSO2NH-i-Bu
2151	2-aminopyridin-6-yl	1	Н	NHSO2NH-t-Bu
2152	2-aminoimidazol-	0	н	NHCOOBn
	5-y1			
2153	2-aminoimidazol-	0	н	$NHCO_2CH_2C_6H_4-(2-CH_3)$
	5-yl			
2154	2-aminoimidazol-	0	Н	$NHCO_2CH_2C_6H_4-(3-CH_3)$
	5-yl			
2155	2-aminoimidazol-	0	н	$NHCO_2CH_2C_6H_4-(4-CH_3)$
	5-yl	•		
2156	2-aminoimidazol-	0	Н	NHCO2CH2 (2-
	5-yl			pyridinyl)
2157	2-aminoimidazol-	0	н	NHCO2CH2 (3-
	5-yl			pyridinyl)
2158	2-aminoimidazol-	0	Н	NHCO2CH2 (4-
	5-yl			pyridinyl)
2159	2-aminoimidazol-	0	Н	NHCO2CH2 (2-
	5-y1			thiazolyl)
2160	2-aminoimidazol-	0	Н	NHCO2CH2 (4-
	5-yl			thiazolyl)

2161	2-aminoimidazol-	0	н	NHCO2CH2 (5-
	5-y1			thiazolyl)
2162	2-aminoimidazol-	0	Н	NHCO2CH2 (4-
	5-yl			isoxazolyl)
2163	2-aminoimidazol-	0	н	NHCO ₂ CH ₂ (2-thienyl)
	5-yl			
2164	2-aminoimidazol-	0	Н	NHCO2n-Bu
	5-y1			•
2165	2-aminoimidazol-	0	Н	NHCO2i-Bu
	5-y1			
2166	2-aminoimidazol-	0	Н	NHCO2t-Bu
	5-y1			
2167	2-aminoimidazol-	0	Н	NHSO ₂ Ph
	5-yl			
2168	2-aminoimidazol-	0	Н	$NHSO_2C_6H_4 - (2-CH_3)$
	5-yl			
2169	2-aminoimidazol-	0	н	$NHSO_2C_6H_4 - (3-CH_3)$
	5-yl			
2170	2-aminoimidazol-	0	Н	NHSO2C6H4-(4-CH3)
	5-yl			
2171	2-aminoimidazol-	0	Н	NHSO ₂ (2-pyridyl)
	5-yl			
2172	2-aminoimidazol-	0	Н	NHSO ₂ (3-pyridyl)
	5-y1			
2173	2-aminoimidazol-	0	Н	NHSO ₂ (4-pyridyl)
	5-y1			
2174	2-aminoimidazol-	0	н	NHSO ₂ (2-thiazolyl)
	5 - yl			
2175	2-aminoimidazol-	0	н	NHSO ₂ (4-thiazolyl)
	5-y1			
2176	2-aminoimidazol-	0	Н	NHSO ₂ (4-isoxazolyl)
	5 - yl			
2177	2-aminoimidazol-	0	Н	NHSO2-[4-(3,5-
	5-yl			dimethyl)isoxazolyl)

2178	2-aminoimidazol-	0	н	NHSO ₂ C ₆ H ₄ -(2-Br)
2179	5-yl 2-aminoimidazol-	0	н	NHSO ₂ C ₆ H ₄ -(3-Br)
2180	5-yl 2-aminoimidazol-	0	н	NHSO ₂ C ₆ H ₄ -(2-F)
2181	5-yl 2-aminoimidazol-	0	н	NHSO ₂ C ₆ H ₄ -(3-F)
2182	5-yl 2-aminoimidazol-	0	н	NHSO ₂ C ₆ H ₄ -(4-F)
2183	5-yl 2-aminoimidazol-	0	н	NHSO ₂ (2-naphthy1)
2184	5-yl 2-aminoimidazol-	0	н	NHSO ₂ (1-naphthyl)
2185	5-yl 2-aminoimidazol-	0	н	NHSO ₂ CH=CHPh
2186	5-yl 2-aminoimidazol-	0	н	NHSO ₂ CH ₂ Ph
2187	5-yl 2-aminoimidazol-	0	н	NHSO ₂ CH ₂ CH=CHPh
2188	5-yl 2-aminoimidazol-	0	н	NHSO ₂ -n-Bu
2189	5-yl 2-aminoimidazol-	0	н	NHSO ₂ -i-Bu
2190	5-yl 2-aminoimidazol-	1	н	NHCOOBn
2191	5-yl 2-aminoimidazol-	1	н	NHCO2CH2C6H4-(2-CH3)
2192	5-yl 2-aminoimidazol- 5-yl	1	н	NHCO2CH2C6H4-(3-CH3)
2193	2-aminoimidazol-	1	Н	NHCO2CH2C6H4-(4-CH3)
2194	5-yl 2-aminoimidazol-	1	н	NHCO2CH2 (2-
	5-yl			pyridinyl)

2195	2-aminoimidazol-	1	Н	инсо ₂ сн ₂ (3-
	5-yl			pyridinyl)
2196	2-aminoimidazol-	1	н	NHCO2CH2 (4-
	5-yl			pyridinyl)
2197	2-aminoimidazol-	1	Н	NHCO2CH2 (2-
	5-y1			thiazolyl)
2198	2-aminoimidazol-	1	Н	NHCO2CH2 (4-
	5-y1			thiazolyl)
2199	2-aminoimidazol-	1	н	NHCO2CH2 (5-
	5-yl			thiazolyl)
2200	2-aminoimidazol-	1	Н	NHCO2CH2 (4-
	5-yl			isoxazolyl)
2201	2-aminoimidazol- 5-yl	1	Н	NHCO ₂ CH ₂ (2-thienyl)
2202	2-aminoimidazol-	1	Н	NHCO2n-Bu
	5-y1			
2203	2-aminoimidazol-	1	Н	NHCO2i-Bu
	5-yl			
2204	2-aminoimidazol-	1	Н	NHCO ₂ t-Bu
	5-y1			
2205	2-aminoimidazol-	1	Н	NHSO ₂ Ph
	5 - y1			
2206	2-aminoimidazol-	1	Н	$NHSO_2C_6H_4-(2-CH_3)$
	5-y1			
2207	2-aminoimidazol-	1	Н	$NHSO_2C_6H_4-(3-CH_3)$
	5-y1			
2208	2-aminoimidazol-	1	Н	$NHSO_2C_6H_4-(4-CH_3)$
2000	5-y1			
2209	2-aminoimidazol-	1	Н	NHSO ₂ (2-pyridyl)
	5-y1			
2210	2-aminoimidazol-	1	Н	NHSO ₂ (3-pyridyl)
	5-y1			
2211	2-aminoimidazol-	1	н	NHSO ₂ (4-pyridyl)
	5-yl			

2212	2-aminoimidazol- 5-yl	1	Н	NHSO ₂ (2-thiaz-olyl)
2213	2-aminoimidazol- 5-yl	1	н	NHSO ₂ (4-isoxazolyl)
2214	2-aminoimidazol-	1	н	NHSO2-[4-(3,5-
	5-yl			dimethyl)isoxazolyl]
2215	2-aminoimidazol-	1	Н	$NHSO_2C_6H_4 - (2-Br)$
	5-yl			
2216	2-aminoimidazol-	1	н	$NHSO_2C_6H_4-(3-Br)$
	5-yl			
2217	2-aminoimidazol-	1	Н	$NHSO_2C_6H_4-(2-F)$
	5-yl			
2218	2-aminoimidazol-	1	н	$NHSO_2C_6H_4-(3-F)$
	5-y1			
2219	2-aminoimidazol-	1	Н	$NHSO_2C_6H_4-(4-F)$
	5-yl			
2220	2-aminoimidazol-	1	Н	$NHSO_2(2-naphthyl)$
	5-yl			
2221	2-aminoimidazol-	1	н	NHSO ₂ (1-naphthyl)
	5-yl			
2222	2-aminoimidazol-	1	н	NHSO ₂ CH=CHPh
	5-yl			
2223	2-aminoimidazol-	1	Н	NHSO ₂ CH ₂ Ph
	5-yl			
2224	2-aminoimidazol-	1	H	NHSO2CH2CH=CHPh
	5-yl			
2225	2-aminoimidazol-	1	Н	NHSO ₂ -n-Bu
	5-y1			
2226	2-aminoimidazol-	1	н	NHSO ₂ -i-Bu
	5-y1			
2227	2-aminoimidazol-	1	Н	NHSO ₂ Ph
	5-y1			
2228	2-aminoimidazol-	1	Н	$NHSO_2C_6H_4-(2-CH_3)$
	5-yl			

2229	2-aminoimidazol- 5-yl	1	Н	NHSO ₂ C ₆ H ₄ -(3-CH ₃)
2230	2-aminoimidazól- 5-yl	1	н	NHSO ₂ C ₆ H ₄ -(4-CH ₃)
2231	2-aminoimidazol- 5-yl	1	н	NHSO ₂ (2-pyridy1)
2232	2-aminoimidazol- 5-yl	1	н	NHSO ₂ (3-pyridyl)
2233	2-aminoimidazol- 5-yl	1	Н	NHSO ₂ (4-pyridyl)
2234	2-aminoimidazol- 5-yl	1	Н	NHSO ₂ (2-thiazolyl)
2235	2-aminoimidazol- 5-yl	1	н	NHSO ₂ (4-isoxazolyl)
2236	2-aminoimidazol-	1	Н	NHSO2-[4-(3,5-
	5-y1			dimethyl)isoxazolyl)
2237	2-aminoimidazol- 5-yl	1	н	NHSO ₂ C ₆ H ₄ -(2-Br)
2238	2-aminoimidazol- 5-yl ·	1	Н	NHSO ₂ C ₆ H ₄ - (3-Br)
2239	2-aminoimidazol- 5-yl	1	н	NHSO ₂ C ₆ H ₄ - (2-F)
2240	2-aminoimidazol- 5-yl	1	H	NHSO ₂ C ₆ H ₄ - (3-F)
2241	2-aminoimidazol- 5-yl	1	н	NHSO ₂ C ₆ H ₄ - (4-F)
2242	2-aminoimidazol- 5-yl	1	Н	NHCO ₂ CH ₂ Ph
2243	2-aminoimidazol- 5-yl	1	н	NHCO2n-Bu
2244	2-aminoimidazol- 5-yl	1	Н	NHCO2i-Bu
2245	2-aminothiazol-4-yl	0	Н	NHSO ₂ Ph
2246	2-aminothiazol-4-yl	0	Н	NHSO ₂ C ₆ H ₄ -(2-CH ₃)
2247	2-aminothiazol-4-yl	0	Н	NHSO ₂ C ₆ H ₄ -(3-CH ₃)

```
NHSO2C6H4-(4-CH3)
2248 2-aminothiazol-4-yl
                                  Н
                                          NHSO<sub>2</sub>(2-pyridyl)
                            0
                                  Н
2249 2-aminothiazol-4-yl
                                          NHSO<sub>2</sub>(3-pyridyl)
2250 2-aminothiazol-4-yl
                           0
                                  н
                                          NHSO2 (4-pyridyl)
2251 2-aminothiazol-4-yl 0
                                  Н
                                         NHSO<sub>2</sub> (2-thiazolyl)
2252 2-aminothiazol-4-yl 0
                                  Н
                                        NHSO<sub>2</sub> (4-isoxazolyl)
2253 2-aminothiazol-4-yl
                                  н
                            0
                                           NHSO2-[4-(3,5-
                                  Н
2254 2-aminothiazol-4-yl 0
                                        dimethyl)isoxazolyl]
                                          NHSO2C6H4-(2-Br)
2255 2-aminothiazol-4-yl
                                  Н
                                          NHSO_2C_6H_4-(3-Br)
                                  Н
2256 2-aminothiazol-4-yl
                                           NHSO2C6H4-(2-F)
2257 2-aminothiazol-4-yl
                                           NHSO2C6H4-(3-F)
2258 2-aminothiazol-4-yl
                                           NHSO2C6H4-(4-F)
2259 2-aminothiazol-4-yl
                             0
                                              NHCO2CH2Ph
2260 2-aminothiazol-4-yl
                             0
                                   Н
                                              NHCO2n-Bu
                             0
                                   Н
2261 2-aminothiazol-4-yl
                                              NHCO2i-Bu
2262 2-aminothiazol-4-yl
                            0
                                   н
                                               NHSO2Ph
2263 2-aminothiazol-4-yl
                            1
                                   Н
                                          NHSO_2C_6H_4 - (2-CH_3)
                                   Н
2264 2-aminothiazol-4-yl
                            1
                                          NHSO2C6H4-(3-CH3)
                                   Н
2265 2-aminothiazol-4-yl
                            1
                                          NHSO2C6H4-(4-CH3)
                                   Н
2266 2-aminothiazol-4-yl
                            1
                                           NHSO<sub>2</sub>(2-pyridyl)
                                   Н
2267 2-aminothiazol-4-yl
                            1
                                           NHSO<sub>2</sub>(3-pyridyl)
                             1
                                   н
2268 2-aminothiazol-4-yl
                                   Н
                                           NHSO<sub>2</sub> (4-pyridyl)
                            1
2269 2-aminothiazol-4-yl
                                          NHSO2 (2-thiazolyl)
                                   Н
2270 2-aminothiazol-4-yl
                                         NHSO2 (4-isoxazolyl)
2271 2-aminothiazol-4-yl
                            1
                                   н
                                            NHSO2-[4-(3,5-
2272 2-aminothiazol-4-yl
                                   Н
                                         dimethyl) isoxazolyl)
                                           NHSO_2C_6H_4-(2-Br)
 2273 2-aminothiazol-4-yl
                                   Н
                                           NHSO_2C_6H_4-(3-Br)
 2274 2-aminothiazol-4-yl
                                    Н
                                            NHSO2C6H4-(2-F)
 2275 2-aminothiazol-4-yl
                                            NHSO2C6H4-(3-F)
 2276 2-aminothiazol-4-yl
                             1
                                            NHSO2C6H4-(4-F)
 2277 2-aminothiazol-4-yl
                             1
                                    Н
                                               NHCO2CH2Ph
                                    Н
 2278 2-aminothiazol-4-yl
                             1
                                               NHCO2n-Bu
                                    Н
 2279 2-aminothiazol-4-yl
                              1
                                               NHCO2i-Bu
                                    Н
 2280 2-aminothiazol-4-yl
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2281	2-aminopyridin-6-	0	H	NHSO ₂ Ph
	ylmethyl			
2282	2-aminopyridin-6-	0	Н	$NHSO_2C_6H_4 - (2-CH_3)$
	ylmethyl			
2283	2-aminopyridin-6-	0	Н	$NHSO_2C_6H_4 - (3-CH_3)$
	ylmethyl			
2284	2-aminopyridin-6-	0	Н	NHSO2C6H4-(4-CH3)
	ylmethyl			
2285	2-aminopyridin-6-	0	н	NHSO ₂ (2-naphthyl)
	ylmethyl			
2286	2-aminopyridin-6-	0	н	NHSO2(1-naphthyl)
	ylmethyl	,		
2287	2-aminopyridin-6-	0	Н	NHSO ₂ (biphenyl)
	ylmethyl			
2288	2-aminopyridin-6-	0	н	NHSO2(2,4,6-
	ylmethyl			trimethylphenyl)
2289	2-aminopyridin-6-	0	Н	NHSO ₂ (2-thienyl)
	ylmethyl			
2290	2-aminopyridin-6-	0	н	NHSO2-[4-(3,5-
	ylmethyl			dimethyl)isoxazolyl)
2291	2-aminopyridin-6-	0	Н	$NHSO_2C_6H_4-(2-Br)$
	ylmethyl			
2292	2-aminopyridin-6-	0	н	NHSO ₂ C ₆ H ₄ -(3-Br)
	ylmethyl			;
2293	2-aminopyridin-6-	0	н	NHSO ₂ C ₆ H ₄ -(2-F)
	ylmethyl			
2294	2-aminopyridin-6-	0	н	NHSO ₂ C ₆ H ₄ -(3-F)
	ylmethyl			
2295	2-aminopyridin-6-	0	н	NHSO ₂ C ₆ H ₄ -(4-F)
	ylmethyl			
2296	2-aminopyridin-6-	0	н	NHCO2CH2Ph
	ylmethyl			• •
2297	2-aminopyridin-6-	0	н	NHCO2n-Bu
	ylmethyl	-	••	4
	1 2			

2298	2-aminopyridin-6-	0	Н	NHCO2i-Bu
	ylmethyl			
2299	2-aminopyridin-6-	1	Н	NHSO ₂ Ph
	ylmethyl			
2300	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4-(2-CH_3)$
	ylmethyl			
2301	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4 - (3-CH_3)$
	ylmethyl			
2302	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4 - (4-CH_3)$
	ylmethyl			
2303	2-aminopyridin-6-	1	Н	NHSO ₂ (2-naphthyl)
	ylmethyl			
2304	2-aminopyridin-6-	1	Н	NHSO ₂ (1-naphthyl)
	ylmethyl			
2305	2-aminopyridin-6-	1	Н	NHSO ₂ (biphenyl)
	ylmethyl			
2306	2-aminopyridin-6~	1	Н	NHSO2 (2,4,6-
	ylmethyl			trimethylphenyl)
2307	2-aminopyridin-6-	1	н	NHSO ₂ (2-thienyl)
	ylmethyl			·
2308	2-aminopyridin-6-	1	Н	NHSO2-[4-(3,5-
	ylmethyl			dimethyl)isoxazolyl]
2309	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4-(2-Br)$
	ylmethyl			
2310	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4-(3-Br)$
	ylmethyl			
2311	2-aminopyridin-6-	1	н	$NHSO_2C_6H_4-(2-F)$
	ylmethyl			
2312	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4-(3-F)$
	ylmethyl			
2313	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4 - (4-F)$
	ylmethyl			
2314	2-aminopyridin-6-	1	Н	NHCO2CH2Ph
	ylmethyl			

2315	2-aminopyridin-6-	1	Н	NHCO2n-Bu
	ylmethyl			
2316	2-aminopyridin-6-	0	H	NHSO ₂ Ph
	ylcarbonyl			
2317	2-aminopyridin-6-	0	Н	$NHSO_2C_6H_4 - (2-CH_3)$
	ylcarbonyl			
2318	2-aminopyridin-6-	0	Н	$NHSO_2C_6H_4 - (3-CH_3)$
	ylcarbonyl			·
2319	2-aminopyridin-6-	0	н	$NHSO_2C_6H_4 - (4-CH_3)$
	ylcarbonyl			
2320	2-aminopyridin-6-	0	н	NHSO ₂ (2-naphthyl)
-	ylcarbonyl			
2321	2-aminopyridin-6-	0	н	NHSO ₂ (1-naphthyl)
	ylcarbonyl			
2322	2-aminopyridin-6-	0	н	NHSO ₂ (biphenyl)
	ylcarbonyl			
2323	2-aminopyridin-6-	0	н	NHSO2 (2,4,6-
	ylcarbonyl			trimethylphenyl)
2324	2-aminopyridin-6-	0	н	NHSO ₂ (2-thienyl)
	ylcarbonyl			
2325	2-aminopyridin-6-	0	н	NHSO ₂ - [4-(3,5-
	ylcarbonyl			dimethyl)isoxazolyl]
2326	2-aminopyridin-6-	0	н	NHSO ₂ C ₆ H ₄ -(2-Br)
	ylcarbonyl	-		
2327	2-aminopyridin-6-	0	н	NHSO ₂ C ₆ H ₄ = (3-Br)
	ylcarbonyl	Ū	••	imbozodnią (5 22)
2328	2-aminopyridin-6-	0	н	NHSO ₂ C ₆ H ₄ - (2-F)
2320	ylcarbonyl	Ü	11	mbozedna (2 1)
2329	2-aminopyridin-6-	0	u	NHSO ₂ C ₆ H ₄ -(3-F)
2323	ylcarbonyl	U	н	NASO2C6A4-(3-F)
2220			••	NTIGO GAUA (A.D)
2330	2-aminopyridin-6-	0	Н	$NHSO_2C_6H_4-(4-F)$
	ylcarbonyl			
2331	2-aminopyridin-6-	0	Н	NHCO2CH2Ph
	ylcarbonyl			

2332	2-aminopyridin-6-	0	Н	NHCO2n-Bu
	ylcarbonyl			
2333	2-aminopyridin-6-	0	Н	NHCO2i-Bu
	ylcarbonyl			
2334	2-aminopyridin-6-	1	н	NHSO ₂ Ph
	ylcarbonyl			
2335	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4 - (2-CH_3)$
	ylcarbonyl			
2336	2-aminopyridin-6-	1	н	$NHSO_2C_6H_4 - (3-CH_3)$
	ylcarbonyl			
2337	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4 - (4-CH_3)$
	ylcarbonyl	•		
2338	2-aminopyridin-6-	1	Н	NHSO ₂ (2-naphthyl)
	ylcarbonyl			
2339	2-aminopyridin-6-	1	Н	NHSO ₂ (1-naphthyl)
	ylcarbonyl			
2340	2-aminopyridin-6-	1	Н	NHSO ₂ (biphenyl)
	ylcarbonyl			
2341	2-aminopyridin-6-	1	Н	NHSO2 (2,4,6-
	ylcarbonyl			trimethylphenyl)
2342	2-aminopyridin-6-	1	Н	NHSO ₂ (2-thienyl)
	ylcarbonyl			
2343	2-aminopyridin-6-	1	Н	NHSO2-[4-(3,5-
	ylcarbonyl			dimethyl)isoxazolyl)
2344	2-aminopyridin-6-	1	н	$NHSO_2C_6H_4-(2-Br)$
	ylcarbonyl			
2345	2-aminopyridin-6-	1	н	$NHSO_2C_6H_4-(3-Br)$
	ylcarbonyl			
2346	2-aminopyridin-6-	1	н	$NHSO_2C_6H_4 - (2-F)$
	ylcarbonyl			
2347	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4 - (3-F)$
	ylcarbonyl			
2348	2-aminopyridin-6-	1	Н	$NHSO_2C_6H_4-(4-F)$
	ylcarbonyl			

2349	2-aminopyridin-6-	1	н	NHCO2CH2Ph
	ylcarbonyl			
2350	2-aminopyridin-6-	1	Н	NHCO2n-Bu
	ylcarbonyl			
2351	2-aminoimidazol-5-	1	H	NHSO ₂ Ph
	ylmethyl			
2352	2-aminoimidazol-5-	1	Н	$NHSO_2C_6H_4-(2-CH_3)$
	ylmethy1			
2353	2-aminoimidazol-5-	1	н	NHSO2C6H4-(3-CH3)
	ylmethyl			
2354	2-aminoimidazol-5-	1	н	NHSO ₂ C ₆ H ₄ - (4-CH ₃)
	ylmethyl			
2355	2-aminoimidazol-5-	1	Н	NHSO ₂ (2-naphthyl)
	ylmethyl			
2356	2-aminoimidazol-5-	1	Н	NHSO ₂ (1-naphthyl)
	ylmethyl			2
2357	2-aminoimidazol-5-	1	н	NHSO ₂ (biphenyl)
	ylmethyl			Z, spaning Z,
2358	2-aminoimidazol-5-	1	H	NHSO ₂ (2,4,6-
	ylmethyl			trimethylphenyl)
2359	2-aminoimidazol-5-	1	н	NHSO ₂ (2-thieny1)
	ylmethyl		••	initial containing the
2360	2-aminoimidazol-5-	1	н	NHSO ₂ -[4-(3,5-
	ylmethyl	-		dimethyl)isoxazolyl]
2361	2-aminoimidazol-5-	1	н	NHSO ₂ C ₆ H ₄ -(2-Br)
	ylmethyl	•	••	M100206114 (2-BI)
2362	2-aminoimidazol-5-	1	н	MUCO-C-U. (2 P-)
	ylmethyl	1	п	NHSO ₂ C ₆ H ₄ -(3-Br)
2363	2-aminoimidazol-5-			\mathrea{\pi_1}
2505	ylmethyl	1	Н	$NHSO_2C_6H_4-(2-F)$
2364	- •	_		
2304	2-aminoimidazol-5-	1	Н	$NHSO_2C_6H_4-(3-F)$
22.65	ylmethyl			
2365	2-aminoimidazol-5-	1	Н	$NHSO_2C_6H_4-(4-F)$
	ylmethyl			

2366	2-aminoimidazol-5-	1	Н	NHCO2CH2Ph
	ylmethyl			
2367	2-aminoimidazol-5-	1	H	NHCO2n-Bu
	ylmethyl			
2368	2-amino-1,3,4-	0	н	NHSO ₂ Ph
	triazol-5-yl-			
	carbonyl			
2369	4-imidazolyl-	0	Н	NHSO ₂ Ph
	carbonyl			
2370	2-aminoimidazol-5-	0	н	NHSO ₂ Ph
	ylmethyl			

Table 3

Ex.	•			,		MS
No.	R ¹	r	R ¹⁰	R14	R ¹⁵	(M+H)+
3001	2- pyridinylamino-	0	Cbz	н	NHSO ₂ Ph	
3002	methyl 2- pyridinylamino-	0	SO ₂ Ph	н	NHSO ₂ Ph	
3003	methyl 2- pyridinylamino-	0	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph	
3004	methyl 2- pyridinylamino-	0	Bn	н	NHSO ₂ Ph	
3005	methyl 2- pyridinylamino-	0	n-Bu	н	NHSO2Ph	
3006	methyl 2- pyridinylamino-	0	COCH ₂ (3-indoly1)	н	NHSO ₂ Ph	
3007	methyl 2- pyridinylamino-	0	SO2- (biphenyl)	Н	NHSO ₂ Ph	
3008	methyl 2- pyridinylamino- methyl	0	CO ₂ -n-Bu	н	NHSO ₂ Ph	

3009	2-	0	CO ₂ -i-Bu	Н	NHSO2Ph	
	pyridinylamino-					
	methyl					
3010	2-	0	CO2-t-Bu	Н	NHSO2Ph	
	pyridinylamino-					
	methyl					
3011	2-	0	н	Н	NHSO ₂ Ph	
	pyridinylamino-					
	methyl					
3012	2-	0	-(CH ₂)4NH ₂	Н	NHSO ₂ Ph	
	pyridinylamino-					
	methyl		•			
3013	2-	0	COPh	Н	NHSO ₂ Ph	
	pyridinylamino-					
	methyl				,	
3014	2-	0	cyclopropyl-	Н	NHSO ₂ Ph	
	pyridinylamino-		methyl			
	methyl					
3015	2-	0	SO ₂ -n-Bu	Н	NHSO ₂ Ph	
	pyridinylamino-					
	methyl					
3016	2-	0	Cbz	H	NHSO ₂ -(2,4,6-	679.4
	pyridinylamino-				trimethylphen	
	methyl				y1)	
3017	2-	0	SO ₂ Ph	Н	NHSO ₂ -(2,4,6-	
	pyridinylamino-				trimethylphen	
	methyl				y1)	
3018	2-	0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ -(2,4,6-	
	pyridinylamino-				trimethylphen	
	methyl		_		yl)	
3019	2-	0	Bn	Н	NHSO ₂ -(2,4,6-	
	pyridinylamino-				trimethylphen	
	methyl				y1)	

3020	2-	0	n-Bu	Н	NHSO2-(2,4,6-	
	pyridinylamino-				trimethylphen	
	methyl				yl)	
3021	2-	0	CO ₂ -n-Bu	Н	NHSO2-(2,4,6-	
	pyridinylamino-				trimethylphen	
	methyl				yl)	
3022	2-	0	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-	
	pyridinylamino-				trimethylphen	
	methyl				yl)	
3023	2-	0	CO ₂ -t-Bu	H	NHSO2-(2,4,6-	
	pyridinylamino-				trimethylphen	
	methyl		•		yl)	
3024	2-	0	н	Н	NHSO2-(2,4,6-	545.5
	pyridinylamino-				trimethylphen	
	methyl				yl)	
3025	2-	0	-(CH2)4NH2	Н	NHSO2-(2,4,6-	
	pyridinylamino-				trimethylphen	
	methyl				yl)	
3026	2-	0	COPh	Н	NHSO2-(2,4,6-	
	pyridinylamino-				trimethylphen	
	methyl				yl)	
3027	2-	0	SO ₂ -n-Bu	н	NHSO2-(2,4,6-	
	pyridinylamino-				trimethylphen	
	methyl	·			yl)	
3028	2-	0	Cbz	H	NHCbz	
	pyridinylamino-					
	methyl					
3029	2-	0	SO ₂ Ph	Н	NHCbz	
	pyridinylamino-					
	methyl					
3030	2-	0	CO(CH ₂) ₂ Ph	Н	NHCbz	
	pyridinylamino-					
	methyl					

3031	2-	0	Bn	н	NHCbz
	pyridinylamino-				
	methyl				
3032	2-	0	n-Bu	Н	NHCbz
	pyridinylamino-				
	methy1				
3033	2-	0	CO ₂ -n-Bu	Н	NHCbz
	pyridinylamino-				
	methyl				
3034	2-	0	CO ₂ -i-Bu	н	NHCbz
	pyridinylamino-				
	methyl				
3035	2-	0	CO2-t-Bu	H	NHCbz
	pyridinylamino-				
	methyl				
3036	2-	0	H	н	NHCbz
	pyridinylamino-				
	methyl				
3037	2-	0	-(CH ₂)4NH ₂	н	NHCbz
	pyridinylamino-				
	methyl				
3038	2-	0	COPh	н	NHCbz
	pyridinylamino-				
	methyl				
3039	2-	0	SO ₂ -n-Bu	н	NHCbz
	pyridinylamino-				
	methyl				
3040	2-	0	Cbz	Н	NHSO2Ph
	imidazolylamino-				
	methyl				
3041	2-	0	SO ₂ Ph	Н	NHSO ₂ Ph
	imidazolylamino-				
	methyl				

3042	2-	0	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph	
	imidazolylamino-					
	methyl					
3043	2-	0	Bn	н	NHSO ₂ Ph	
	imidazolylamino-					
	methyl					
3044	2-	0	n-Bu	Н	NHSO ₂ Ph	
	imidazolylamino-			•		
	methyl					
3045	2-	0	COCH ₂ (3-	Н	NHSO ₂ Ph	
	imidazolylamino-		indolyl)			
	- methyl					
3046	2-	0	so ₂ -	Н	NHSO ₂ Ph	
	imidazolylamino-		(biphenyl)			
	methyl					
3047	2-	0	CO2-n-Bu	Н	NHSO ₂ Ph	
	imidazolylamino-					
	methyl					
3048	2-	0	CO2-i-Bu	Н	NHSO ₂ Ph	
	imidazolylamino-					
	methyl					
3049	2-	0	CO ₂ -t-Bu	Н	NHSO ₂ Ph	
	imidazolylamino-					
	methyl					
3050	2-	0	н	Н	NHSO ₂ Ph	492.3
	imidazolylamino-					
	methyl					
3051	2-	0	-(CH ₂) ₄ NH ₂	H	NHSO ₂ Ph	
	imidazolylamino-					
	methyl					
3052	2-	0	COPh	н	NHSO ₂ Ph	
	imidazolylamino-					
	methyl					

3053	2-	0	cyclopropyl-	Н	NHSO2Ph	
	imidazolylamino-		methyl			
	methyl					
3054	2-	0	SO ₂ -n-Bu	Н	NHSO ₂ Ph	
	imidazolylamino-					
	methyl					
3055	2-	0	Cbz	Н	NHSO2-(2,4,6-	668.4
	imidazolylamino-				trimethylphen	
	methyl				yl)	
3056	2-	0	SO ₂ Ph	Н	NHSO2-(2,4,6-	
	imidazolylamino-				trimethylphen	
	methyl				yl)	
3057	2-	0	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-	
	imidazolylamino-				trimethylphen	
	methyl				y1)	
3058	2-	0	Bn	Н	NHSO2-(2,4,6-	
	imidazolylamino-				trimethylphen	
	methyl				yl)	
3059	2-	0	n-Bu	н	NHSO ₂ -(2,4,6-	
	imidazolylamino-				trimethylphen	
	methyl				yl)	
3060	2-	0	CO ₂ -n-Bu	н	NHSO ₂ -(2,4,6-	
	imidazolylamino-				trimethylphen	
	methyl				yl)	
3061	2-	0	CO ₂ -i-Bu	н	NHSO ₂ -(2,4,6-	
	imidazolylamino-				trimethylphen	
	methyl				y1)	
3062	2-	0	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-	
	imidazolylamino-				trimethylphen	
	methyl				yl)	
3063	2-	0	Н	Н	NHSO ₂ -(2,4,6-	534.4
	imidazolylamino-				trimethylphen	
	methyl				y1)	

3064	2-	0	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	imidazolylamino-				trimethylpher
	methyl				yl)
3065	2-	0	COPh	Н	NHSO2-(2,4,6-
	imidazolylamino-				trimethylphen
	methyl				yl)
3066	2-	0	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	imidazolylamino-				trimethylphen
	methyl				yl)
3067	2-	0	Cbz	Н	NHCbz
	imidazolylamino-				
	methyl		-		
3068	2-	0	SO ₂ Ph	H	NHCbz
	imidazolylamino-				
	methyl				
3069	2-	0	CO(CH ₂) ₂ Ph	н	NHCbz
	imidazolylamino-				
	methyl				
3070	2-	0	Bn	н	NHCbz
	imidazolylamino-				
	methyl				
3071	2-	0	n-Bu	H	NHCbz
	imidazolylamino-				
	methyl				
3072	2-	0	CO ₂ -n-Bu	Н	NHCbz
	imidazolylamino-				
	methy1				
3073	2-	0	CO ₂ -i-Bu	Н	NHCbz
	imidazolylamino-				
	methyl				
3074	2-	0	CO ₂ -t-Bu	Н	NHCbz
	imidazolylamino-				
	methyl				

3075	2-	0	н	Н	NHCbz
	imidazolylamino-				
	methyl				
3076	2-	0	- (CH ₂) ₄ NH ₂	Н	NHCbz
	imidazolylamino-				
	methyl				
3077	2-	0	COPh	Н	NHCbz
	imidazolylamino-				
	methyl				
3078	2-	0	so ₂ -n-Bu	Н	NHCbz
	imidazolylamino-				
	methy1		-		
3079	2-imidazolinyl-	0	Cbz	Н	NHSO ₂ Ph
	aminomethyl				
3080	2-imidazolinyl-	0	SO ₂ Ph	Н	NHSO ₂ Ph
	aminomethyl		•		•
3081	2-imidazolinyl-	0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
	aminomethy1				-w.eo n\
3082	2-imidazolinyl-	0	Bn	н	NHSO ₂ Ph
	aminomethyl				ATION DE
3083	2-imidazolinyl-	0	n-Bu	н	NHSO ₂ Ph
	aminomethyl				MICO - Db
3084	2-imidazolinyl-	0	COCH ₂ (3-	Н	NHSO ₂ Ph
	aminomethyl		indolyl)		MICO-Db
3085	2-imidazolinyl-	0	so ₂ -	н	NHSO ₂ Ph
	aminomethyl		(biphenyl)		MICO. Dh
3086	2-imidazolinyl-	0	CO ₂ -n-Bu	Н	NHSO ₂ Ph
	aminomethyl				NHSO ₂ Ph
3087		0	CO ₂ -i-Bu	Н	NHSOZPII
	aminomethyl		· -		MICO-Db
3088	_	0	CO ₂ -t-Bu	Н	NHSO ₂ Ph
	aminomethyl				NHSO ₂ Ph
3089		0	н	Н	พนอก5 ม
	aminomethyl				

3090	2-imidazolinyl-	0	-(CH ₂) ₄ NH ₂	Н	NHSO ₂ Ph	
3091	aminomethyl 2-imidazolinyl-	- 0	COPh	н	NHSO ₂ Ph	
3092	aminomethyl 2-imidazolinyl-	0	cyclopropyl-	н	NHSO ₂ Ph	
	aminomethyl		methyl			
3093	2-imidazolinyl-	0	so ₂ -n-Bu	н	NHSO2Ph	
	aminomethyl					
3094	2-imidazolinyl-	0	Cbz	н	NHSO2-(2,4,6-	
	aminomethyl				trimethylphen	
					yl)	
3095	_2-imidazolinyl-	0	SO ₂ Ph	н	NHSO2-(2,4,6-	
	aminomethyl				trimethylphen	
					y1)	
3096	2-imidazolinyl-	0	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-	
	aminomethyl				trimethylphen	
					y1)	
3097	2-imidazolinyl-	0	Bn	н	NHSO2-(2,4,6-	
	aminomethyl				trimethylphen	
	-				y1)	
3098	2-imidazolinyl-	0	n-Bu	н	NHSO ₂ -(2,4,6-	
	aminomethy1				trimethylphen	
					yl)	
3099	2-imidazolinyl-	0	CO2-n-Bu	н	NHSO2-(2,4,6-	
	aminomethyl				trimethylphen	
					y1)	
3100	2-imidazolinyl-	0	CO2-i-Bu	н	NHSO2-(2,4,6-	
	aminomethyl				trimethylphen	
					y1)	
3101	2-imidazolinyl-	0	CO2-t-Bu	н	NHSO2-(2,4,6-	
	aminomethyl				trimethylphen	
	•				y1)	
3102	2-imidazolinyl-	. 0	н	н	NHSO ₂ -(2,4,6-	536.3
	aminomethyl	_	. -	-	trimethylphen	
					y1)	
					<i>y - 1</i>	

3103	2-imidazolinyl-	0	-(CH2)4NH2	H	NHSO2-(2,4,6-
	aminomethyl				trimethylphen
					yl)
3104	2-imidazolinyl-	0	COPh	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphen
					yl)
3105	2-imidazolinyl-	0	so ₂ -n-Bu	н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphen
					yl)
3106	2-imidazolinyl-	0	Cbz	Н	NHCbz
	aminomethyl				
3107	2-imidazolinyl-	0	SO ₂ Ph	Н	NHCbz
	aminomethyl				•
3108	2-imidazolinyl-	0	CO(CH ₂) ₂ Ph	н	NHCbz
	aminomethyl				
3109	2-imidazolinyl-	0	Bn	Н	NHCbz
	aminomethyl				
3110	2-imidazolinyl-	0	n-Bu	H	NHCbz
	aminomethyl				
3111	2-imidazolinyl-	0	CO ₂ -n-Bu	Н	NHCbz
	aminomethyl				
3112	2-imidazolinyl-	0	CO ₂ -i-Bu	Н	NHCbz
	aminomethyl				
3113	2-imidazolinyl-	0	CO ₂ -t-Bu	Н	NHCbz
	aminomethyl				
3114	2-imidazolinyl-	0	н	н	NHCbz
	aminomethyl				
3115	2-imidazolinyl-	0	-(CH2)4NH2	Н	NHCbz
	aminomethyl				
3116	2-imidazolinyl-	0	COPh	Н	NHCbz
	aminomethyl				
3117	2-imidazolinyl-	0	SO ₂ -n-Bu	Н	NHCbz
	aminomethyl				

3118	2-	0	Cbz	Н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3119	2-	0	SO ₂ Ph	н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3120	2-	0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3121	2-	0	Bn	Н	NHSO2Ph
	benzimidazolyl-				
	aminomethyl				
3122	2-	0	n-Bu	Н	NHSO2Ph
	benzimidazolyl-				
	aminomethyl				
3123	2-	0	COCH ₂ (3-	н	NHSO2Ph
	benzimidazolyl-		indolyl)		
	aminomethyl				
3124	2-	0	SO2-	Н	NHSO ₂ Ph
	benzimidazolyl-		(biphenyl)		
	aminomethyl				
3125	2-	0	CO ₂ -n-Bu	Н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3126	2-	0	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3127	2-	0	CO ₂ -t-Bu	Н	NHSO2Ph
	benzimidazolyl-				
	aminomethyl				
3128	2-	0	н	Н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				

3129	2-	0	-(CH ₂) ₄ NH ₂	н	NHSO2Ph	
	benzimidazolyl-					
	aminomethyl					
3130	2-	0	COPh	Н	NHSO ₂ Ph	
	benzimidazolyl-					
	aminomethyl					
3131	2-	0	cyclopropyl-	Н	NHSO2Ph	
	benzimidazolyl-		methyl			
	aminomethyl					
3132	2-	0	SO ₂ -n-Bu	Н	NHSO ₂ Ph	
	benzimidazolyl-					
	aminomethyl		•			
3133	2-	0	Cbz	Н	NHSO ₂ -(2,4,6-	718.4
	benzimidazolyl-				trimethylphen	
	aminomethyl				yl)	
3134	2-	0	SO ₂ Ph	Н	NHSO ₂ -(2,4,6-	
	benzimidazolyl-				trimethylphen	
	aminomethyl				y 1)	
3135	2-	0	$CO(CH_2)_2Ph$	Н	NHSO ₂ -(2,4,6-	
	benzimidazolyl-				trimethylphen	
	aminomethyl				yl)	
3136	2-	0	Bn	Н	NHSO ₂ -(2,4,6-	
	benzimidazolyl-				trimethylphen	
	aminomethyl				yl)	
3137	2-	0	n-Bu	Н	$NHSO_2 - (2,4,6-$	
	benzimidazolyl-				trimethylphen	
	aminomethyl				y1)	
3138	2-	0	CO ₂ -n-Bu	Н	NHSO2-(2,4,6-	
	benzimidazolyl-				trimethylphen	
	aminomethyl				y1)	
3139	2-	0	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-	
	benzimidazolyl-				trimethylphen	
	aminomethyl				yl)	

3140	2-	0	CO ₂ -t-Bu	н	NHSO2-(2,4,6-	
	benzimidazolyl-				trimethylphen	
	aminomethyl				yl)	
3141	2-	0	н	Н	NHSO2~(2,4,6-	584.2
	benzimidazolyl-				trimethylphen	
	aminomethyl				y1)	
3142	2 –	0	-(CH2)4NH2	Н	NHSO2-(2,4,6-	
	benzimidazolyl-				trimethylphen	
	aminomethyl				y1)	
3143	2-	0	COPh	н	NHSO2-(2,4,6-	
	benzimidazolyl-				trimethylphen	
	_ aminomethyl				y1)	
3144	2-	0	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-	
	benzimidazolyl-				trimethylphen	
	aminomethyl				yl)	
3145	2-	0	Cbz	H	NHCbz	
	benzimidazolyl-					
	aminomethyl					
3146	2-	0	SO ₂ Ph	н	NHCbz	
	benzimidazolyl-					
	aminomethyl					
3147	2-	0	CO(CH ₂) ₂ Ph	Н	NHCbz	
	benzimidazolyl-					
	aminomethyl					
3148	2-	0	Bn	н	NHCbz	
	benzimidazolyl-				•	
	aminomethyl					
3149	2-	0	n-Bu	Н	NHCbz	
	benzimidazolyl-		•			
	aminomethyl					
3150	2-	0	CO ₂ -n-Bu	Н	NHCbz	
	benzimidazolyl-					
	aminomethyl					

3151	2-	0	CO ₂ -i-Bu	н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3152	2-	0	CO ₂ -t-Bu	н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3153	2-	0	н	н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3154	2-	0	-(CH2)4NH2	н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3155	2-	0	COPh	н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3156	2~	0	SO ₂ -n-Bu	Н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3157	7-aza-2-	0	Cbz	Н	NHSO ₂ Ph
	benzimidazolyl				
3158	7-aza-2-	0	SO ₂ Ph	н	NHSO ₂ Ph
	benzimidazolyl				
3159	7-aza-2-	0	CO(CH ₂) ₂ Ph	H	NHSO ₂ Ph
	benzimidazolyl				
3160	7-aza-2-	0	Bn	Н	NHSO ₂ Ph
	benzimidazolyl				
3161	7-aza-2-	0	n-Bu	H	NHSO ₂ Ph
	benzimidazolyl				
3162	7-aza-2-	0	COCH ₂ (3-	H	NHSO ₂ Ph
	benzimidazolyl		indolyl)		
3163	7-aza-2-	0	SO2-	н	NHSO ₂ Ph
	benzimidazolyl		(biphenyl)		
3164	7-aza-2-	0	CO ₂ -n-Bu	Н	NHSO ₂ Ph
	benzimidazolyl				

3165	7-aza-2-	0	CO ₂ -i-Bu	н	NHSO2Ph
	benzimidazolyl				
3166	7-aza-2-	0	CO ₂ -t-Bu	Н	NHSO2Ph
	benzimidazolyl				
3167	7-aza-2-	0	н	Н	NHSO ₂ Ph
	benzimidazolyl				
3168	7-aza-2-	0	-(CH2)4NH2	Н	NHSO ₂ Ph
	benzimidazolyl				
3169	7-aza-2-	0	COPh	Н	NHSO2Ph
	benzimidazolyl				
3170	7-aza-2-	0	cyclopropyl-	Н	NHSO ₂ Ph
	benzimidazolyl		methyl		
3171	7-aza-2-	0	SO ₂ -n-Bu	Н	NHSO2Ph
	benzimidazolyl				
3172	7-aza-2-	0	Cbz	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3173	7-aza-2-	0	SO ₂ Ph	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3174	7-aza-2-	0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ -(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3175	7-aza-2-	0	Bn	H	NHSO ₂ -(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3176	7-aza-2-	0	n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3177	7-aza-2-	0	CO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3178	7-aza-2-	0	CO ₂ -i-Bu	Н	NHSO ₂ -(2,4,6-
	benzimidazolyl				trimethylphen
					yl)

3179	7-aza-2-	0	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3180	7-aza-2-	0	н	H	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3181	7-aza-2-	0	- ('CH2) 4NH2	Н	NHSO ₂ -(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3182	7-aza-2-	0	COPh	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					y1)
3183	7-aza-2-	0	so ₂ -n-Bu	Н	NHSO ₂ -(2,4,6-
	benzimidazolyl				trimethylphen
					y 1)
3184	7-aza-2-	0	Cbz	Н	NHCbz
	benzimidazolyl				
3185	7-aza-2-	0	SO ₂ Ph	Н	NHCbz
	benzimidazolyl				
3186	7-aza-2-	0	CO(CH ₂) ₂ Ph	Н	NHCbz
	benzimidazolyl				
3187	7-aza-2-	0	Bn	Н	NHCbz
	benzimidazolyl				
3188	7-aza-2-	0	n-Bu	н	NHCbz
	benzimidazolyl				
3189	7-aza-2-	0	CO ₂ -n-Bu	Н	NHCbz
	benzimidazolyl				
3190	7-aza-2-	0	CO ₂ -i-Bu	Н	NHCbz
	benzimidazolyl				
3191	7-aza-2-	0	CO ₂ -t-Bu	H	NHCbz
	benzimidazolyl				
3192	7-aza-2-	0	Н	н	NHCbz
	benzimidazolyl				
3193	7-aza-2-	0	-(CH2)4NH2	Н	NHCbz
	benzimidazolyl				

3194	7-aza-2-	0	COPh	н	NHCbz
	benzimidazolyl				
3195	7-aza-2-	0	SO2-n-Bu	Н	NHCbz
	benzimidazolyl				
3196	tetrahydropyrimi	0	Cbz	Н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3197	tetrahydropyrimi	0	SO ₂ Ph	н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3198	tetrahydropyrimi	0	CO(CH ₂) ₂ Ph	Н	NHSO2Ph
	din-2-				
	ylaminomethyl				
3199	tetrahydropyrimi	0	Bn	Н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3200	tetrahydropyrimi	0	n-Bu	Н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3201	tetrahydropyrimi	0	COCH ₂ (3-	Н	NHSO2Ph
	din-2-		indolyl)		
	ylaminomethyl				
3202	tetrahydropyrimi	0	SO2-	H	NHSO2Ph
	din-2-		(biphenyl)		
	ylaminomethyl				
3203	tetrahydropyrimi	0	CO ₂ -n-Bu	Н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3204	tetrahydropyrimi	0	CO ₂ -i-Bu	Н	NHSO2Ph
	din-2-				
	ylaminomethyl				
3205	tetrahydropyrimi	0	CO ₂ -t-Bu	Н	NHSO2Ph
	din-2-				
	ylaminomethyl				

3206	tetrahydropyrimi	0	н	н	NHSO2Ph
	din-2-	Ĭ			
	ylaminomethyl				
3207	_	0	-(CH ₂) ₄ NH ₂	н	NHSO ₂ Ph
	din-2-				2
	ylaminomethyl				
3208		0	COPh	н	NHSO ₂ Ph
	din-2-				-
	ylaminomethyl				
3209		0	cyclopropyl-	н	NHSO ₂ Ph
	din-2-		methyl		
	ylaminomethyl				
3210	tetrahydropyrimi	0	so ₂ -n-Bu	н	NHSO2Ph
	din-2-				
	ylaminomethyl				
3211	tetrahydropyrimi	0	Cbz	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				y1}
3212	tetrahydropyrimi	0	SO ₂ Ph	н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3213	tetrahydropyrimi	0	$CO(CH_2)_2Ph$	H	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3214	tetrahydropyrimi	0	Bn	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				y1)
3215	tetrahydropyrimi	0	n-Bu	Н	NHSO ₂ -(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3216	tetrahydropyrimi	0	CO ₂ -n-Bu	Н	NHSO ₂ -(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)

3217	tetrahydropyrimi	0	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3218	tetrahydropyrimi	0	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3219	tetrahydropyrimi	0	н	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3220	tetrahydropyrimi	0	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl		٠		yl)
3221	tetrahydropyrimi	0	COPh	Н	NHSO ₂ -(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3222	tetrahydropyrimi	0	so ₂ -n-Bu	н	NHSO ₂ -(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3223	tetrahydropyrimi	0	Cbz	Н	NHCbz
	din-2-				
	ylaminomethyl				
3224	tetrahydropyrimi	0	SO ₂ Ph	Н	NHCbz
	din-2-				
	ylaminomethyl		•		
3225		0	CO(CH ₂) ₂ Ph	Н	NHCbz
	din-2-				
	ylaminomethyl				
3226	tetrahydropyrimi	0	Bn	Н	NHCbz
	din-2-				
	ylaminomethyl				
3227	tetrahydropyrimi	0	n-Bu	H	NHCbz
	din-2-				
	ylaminomethyl				

3228		0	CO ₂ -n-Bu	Н	NHCbz
	din-2-				
	ylaminomethyl				
3229	tetrahydropyrimi	0	CO ₂ -i-Bu	Н	NHCbz
	din-2-				
	ylaminomethyl				
3230	tetrahydropyrimi	0	CO ₂ -t-Bu	Н	NHCbz
	din-2-				
	ylaminomethyl				
3231	tetrahydropyrimi	0	Н	Н	NHCbz
	din-2-				
	ylaminomethyl		•		
3232	tetrahydropyrimi	0	-(CH ₂) ₄ NH ₂	Н	NHCbz
	din-2-				
	ylaminomethyl				
3233	tetrahydropyrimi	0	COPh	Н	NHCbz
	din-2-				
	ylaminomethyl				
3234	tetrahydropyrimi	0	SO ₂ -n-Bu	н	NHCbz
	din-2-				
	ylaminomethyl				51
3235	2-	1	Cbz	Н	NHSO ₂ Ph
	pyridinylamino-				
	methyl				17170 D
3236	2-	1	SO ₂ Ph	Н	NHSO2Ph
	pyridinylamino-				
	methyl				
3237	2-	1	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
	pyridinylamino-				
	methyl				
3238	2-	1	Bn	Н	NHSO ₂ Ph
	pyridinylamino-				
	methyl				

3239	2-	1	n-Bu	н	NHSO2Ph
	pyridinylamino-				
	methyl				
3240	2-	1	COCH ₂ (3-	Н	NHSO ₂ Ph
	pyridinylamino-		indolyl)		
	methyl				
3241	2-	1	SO2-	н	NHSO ₂ Ph
	pyridinylamino-		(biphenyl)		
	methyl				
3242	2-	1	CO ₂ -n-Bu	Н	NHSO ₂ Ph
	pyridinylamino-				
	methyl				
3243	2-	1	CO ₂ -i-Bu	н	NHSO2Ph
	pyridinylamino-				
	methyl				
3244	2-	1	CO ₂ -t-Bu	н	NHSO2Ph
	pyridinylamino-				
	methyl				
3245	2-	1	н	Н	NHSO2Ph
	pyridinylamino-				
	methyl		•		
3246	2-	1	-(CH ₂)4NH ₂	H	NHSO2Ph
	pyridinylamino-				
	methyl				
3247	2-	1	COPh	н	NHSO2Ph
	pyridinylamino-				
	methyl				
3248	2-	1	cyclopropyl-	н	NHSO2Ph
	pyridinylamino-		methyl		
	methyl				
3249	2-	1	so ₂ -n-Bu	Н	NHSO ₂ Ph
	pyridinylamino-				
	methyl				

pyridinylamino- trimethyl y1) methyl y1) 3251 2- 1 SO ₂ Ph H NHSO ₂ -(2,4)	phen
70 Ph 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
3251 2- 1 SO ₂ Ph H NHSO ₂ -(2,4	
	4,6-
pyridinylamino- trimethyl	phen
methyl yl)	
3252 2- 1 CO(CH ₂) ₂ Ph H NHSO ₂ -(2,	4,6-
pyridinylamino- trimethyl	phen
methyl yl)	
3253 2- 1 Bn H NHSO ₂ -(2,	4,6-
pyridinylamino- trimethyl	phen
methyl yl)	
3254 2- 1 n-Bu H NHSO ₂ -(2,	4,6-
pyridinylamino- trimethyl	phen
methyl yl)	
3255 2- 1 CO ₂ -n-Bu H NHSO ₂ -(2,	4,6-
pyridinylamino- trimethyl	phen
methyl yl)	
3256 2- 1 CO ₂ -i-Bu H NHSO ₂ -(2,	4,6-
pyridinylamino- trimethyl	phen
methyl y1)	
3257 2- 1 CO ₂ -t-Bu H NHSO ₂ -(2,	4,6-
pyridinylamino- trimethy:	lphen
methyl yl)	
3258 2- 1 H H NHSO ₂ -(2)	4,6-
pyridinylamino- trimethy	lphen
methyl yl)	
3259 2- 1 -(CH ₂) ₄ NH ₂ H NHSO ₂ -(2	,4,6-
pyridinylamino- trimethy	lphen
methyl yl)	
3260 2- 1 COPh H NHSO ₂ -(2	,4,6-
pyridinylamino- trimethy	lphen
methyl yl)	

3261	2-	1	so ₂ -n-Bu	н	NHSO2-(2,4,6-
	pyridinylamino-				trimethylphen
	methyl				yl)
3262	2-	1	Cbz	Н	NHCbz
	pyridinylamino-				
	methyl				
3263	2-	1	SO ₂ Ph	н	NHCbz
	pyridinylamino-				
	methyl				
3264	2-	1	CO(CH ₂) ₂ Ph	н	NHCbz
	pyridinylamino-				
	methyl				
3265	2-	1	Bn	н	NHCbz
	pyridinylamino-				
	methyl				
3266	2-	1	n-Bu	H	NHCbz
	pyridinylamino-				
	methyl				
3267	2-	1	CO ₂ -n-Bu	н	NHCbz
	pyridinylamino-				
	methyl				
3268	2-	1	CO ₂ -i-Bu	Н	NHCbz
	pyridinylamino-				
	methyl				
3269	2-	1	CO ₂ -t-Bu	Н	NHCbz
	pyridinylamino-				
	methyl				
3270	2-	1	Н	Н	NHCbz
	pyridinylamino-				
	methyl				
3271	2-	1	-(CH ₂) ₄ NH ₂	н	NHCbz
	pyridinylamino-				
	methyl				

3272	2-	1	COPh	н	NHCbz
	pyridinylamino-				
	methyl				
3273	2-	1	SO ₂ -n-Bu	Н	NHCbz
	pyridinylamino-				
	methyl				
3274	2-	1	Cbz	Н	NHSO ₂ Ph
	imidazolylamino-				
	methyl				
3275	2-	1	SO ₂ Ph	Н	NHSO2Ph
	imidazolylamino-				
	methyl				
3276	2-	1	$CO(CH_2)_2Ph$	H	NHSO ₂ Ph
	imidazolylamino-				
	methyl				
3277	2-	1	Bn	Н	NHSO2Ph
	imidazolylamino-				
	methyl				
3278	2-	1	n-Bu	Н	NHSO ₂ Ph
	imidazolylamino-				
	methyl				
3279	2-	1	COCH ₂ (3-	Н	NHSO ₂ Ph
	imidazolylamino-		indoly1)		
	methyl				
3280	2-	1	so ₂ -	Н	NHSO ₂ Ph
	imidazolylamino-		(biphenyl)		
	methyl				- •
3281	2-	1	CO ₂ -n-Bu	Н	NHSO ₂ Ph
	imidazolylamino-				
	methyl				
3282	2-	1	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	imidazolylamino-				
	methyl				

3283	2~	1	CO2-t-Bu	Н	NHSO2Ph
	imidazolylamino-				
	methyl				
3284	2-	1	н	н	NHSO2Ph
	imidazolylamino-				
	methyl				
3285	2-	1	-(CH ₂)4NH ₂	Н	NHSO ₂ Ph
	imidazolylamino-			-	_
	methyl				
3286	2-	1	COPh	Н	NHSO ₂ Ph
	imidazolylamino-				
	methyl				
3287	2-	1	cyclopropyl-	Н	NHSO ₂ Ph
	imidazolylamino-		methyl		
	methyl				
3288	2-	1	so ₂ -n-Bu	н	NHSO2Ph
	imidazolylamino-				
	methyl				
3289	2-	1	Cbz	Н	NHSO2-(2,4,6-
	imidazolylamino-				trimethylphen
	methyl				yl)
3290	2-	1	SO ₂ Ph	Н	NHSO2-(2,4,6-
	imidazolylamino-				trimethylphen
	methyl				yl)
3291	2~	1	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-
	imidazolylamino-				trimethylphen
	methyl				yl)
3292	2-	1	Bn	Н	NHSO2-(2,4,6-
	imidazolylamino-				trimethylphen
	methy1				yl)
3293	2-	1	n-Bu	Н	NHSO2-(2,4,6-
	imidazolylamino-				trimethylphen
	methyl				yl)

2-	1	CO ₂ -n-Bu	н	NHSO ₂ -(2,4,6-
imidazolylamino-				trimethylphen
methyl				yl)
2-	1	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
imidazolylamino-				trimethylphen
methyl				yl)
2-	1	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
imidazolylamino-				trimethylphen
methyl				y1)
2-	1	н	н	NHSO2-(2,4,6-
imidazolylamino-				trimethylphen
methyl				yl)
2-	1	-(CH2)4NH2	н	NHSO2-(2,4,6-
imidazolylamino-				trimethylphen
methyl				yl)
2-	1	COPh	Н	NHSO2-(2,4,6-
imidazolylamino-				trimethylphen
methyl				y1)
2-	1	SO2−n-Bu	Н	NHSO2-(2,4,6-
imidazolylamino-				trimethylphen
methyl				y1)
2-	1	Cbz	Н	NHCbz
imidazolylamino-				
methyl				
2-	1	SO ₂ Ph	Н	NHCbz
imidazolylamino-				
methyl				
2-	1	CO(CH ₂) ₂ Ph	Н	NHCbz
imidazolylamino-				
methyl				
2-	1	Bn	H	NHCbz
imidazolylamino-				
methyl				
	imidazolylamino- methyl 2- imidazolylamino-	imidazolylamino- methyl 2- imidazolylamino- methyl	imidazolylamino- methyl 2- 1 CO2-i-Bu imidazolylamino- methyl 2- 1 CO2-t-Bu imidazolylamino- methyl 2- 1 H imidazolylamino- methyl 2- 1 -(CH2)4NH2 imidazolylamino- methyl 2- 1 COPh imidazolylamino- methyl 2- 1 SO2-n-Bu imidazolylamino- methyl 2- 1 Cbz imidazolylamino- methyl 2- 1 Co(CH2)2Ph imidazolylamino- methyl 2- 1 Bn imidazolylamino- methyl 2- 1 Bn	imidazolylamino- methyl 2- 1 CO2-i-Bu H imidazolylamino- methyl 2- 1 CO2-t-Bu H imidazolylamino- methyl 2- 1 H H imidazolylamino- methyl 2- 1 -(CH2)4NH2 H imidazolylamino- methyl 2- 1 COPh H imidazolylamino- methyl 2- 1 SO2-n-Bu H imidazolylamino- methyl 2- 1 SO2-Ph H imidazolylamino- methyl 2- 1 Cbz H imidazolylamino- methyl 2- 1 Cbz H imidazolylamino- methyl 2- 1 SO2Ph H imidazolylamino- methyl 2- 1 Bn H imidazolylamino- methyl 2- 1 Bn H

3305	2-	1	n-Bu	Н	NHCbz
	imidazolylamino-				
	methyl				
3306	2-	1	CO ₂ -n-Bu	н	NHCbz
	imidazolylamino-				
	methyl				
3307	2-	1	CO ₂ -i-Bu	Н	NHCbz
	imidazolylamino-				
	methyl				
3308	2-	1	CO ₂ -t-Bu	н	NHCbz
	imidazolylamino-				
	methyl				
3309	2-	1	н	н	NHCbz
	imidazolylamino-				
	methyl				
3310	2-	1	-(CH ₂) ₄ NH ₂	н	NHCbz
	imidazolylamino-				
	methyl				
3311	2-	1	COPh	Н	NHCbz
	imidazolylamino-				
	methyl				
3312	2-	1	so ₂ -n-Bu	Н	NHCbz
	imidazolylamino-				
	methyl				
3313	2-imidazolinyl-	1	Cbz	Н	NHSO ₂ Ph
	aminomethyl				
3314	2-imidazolinyl-	1	SO ₂ Ph	н	NHSO2Ph
	aminomethyl				
3315	2-imidazolinyl-	1	$CO(CH_2)_2Ph$	Н	NHSO2Ph
	aminomethyl				
3316	2-imidazolinyl-	1	Bn	Н	NHSO2Ph
	aminomethyl				
3317	2-imidazolinyl-	1	n-Bu	н	NHSO2Ph
	aminomethyl				

3318	2-imidazolinyl-	1	COCH ₂ (3-	н	NHSO ₂ Ph
	aminomethyl		indolyl)		
3319	2-imidazolinyl-	1	so ₂ -	Н	NHSO ₂ Ph
	aminomethyl		(biphenyl)		
3320	2-imidazolinyl-	1	CO ₂ -n-Bu	Н	NHSO ₂ Ph
	aminomethyl				
3321	2-imidazolinyl-	1	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	aminomethyl				
3322	2-imidazolinyl-	1	CO ₂ -t-Bu	Н	NHSO ₂ Ph
	aminomethyl				
3323	2-imidazolinyl-	1	Н	н	NHSO ₂ Ph
	aminomethyl				
3324	2-imidazolinyl-	1	-(CH2)4NH2	н	NHSO ₂ Ph
	aminomethyl				
3325	2-imidazolinyl-	1	COPh	Н	NHSO ₂ Ph
	aminomethyl				
3326	2-imidazolinyl-	1	cyclopropyl-	Н	NHSO ₂ Ph
	aminomethyl		methyl		
3327	2-imidazolinyl-	1	SO ₂ -n-Bu	Н	NHSO ₂ Ph
	aminomethyl				
3328	2-imidazolinyl-	1	Cbz	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphen
					yl)
3329	2-imidazolinyl-	1	SO ₂ Ph	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphen
					yl)
3330	2-imidazolinyl-	1	CO(CH ₂) ₂ Ph	H	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphen
					yl)
3331	2-imidazolinyl-	1	Bn	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphen
					y1)
3332	2-imidazolinyl-	1	n-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphen
					y1)

3333	2-imidazolinyl-	1	CO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphen
					yl)
3334	2-imidazolinyl-	1	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphen
					yl)
3335	2-imidazolinyl-	1	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	aminomethyl			•	trimethylphen
					y 1)
3336	2-imidazolinyl-	1	н	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphen
					y1)
3337	2-imidazolinyl-	1	-(CH2)4NH2	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphen
					y1)
3338	2-imidazolinyl-	1	COPh	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphen
					yl)
3339	2-imidazolinyl-	1	so ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphen
					yl)
3340	2-imidazolinyl-	1	Cbz	Н	NHCbz
	aminomethyl				
3341	2-imidazolinyl-	1	SO ₂ Ph	Н	NHCbz
	aminomethyl				
3342	2-imidazolinyl-	1	CO(CH ₂) ₂ Ph	Н	NHCbz
	aminomethyl				
3343	2-imidazolinyl-	1	Bn	Н	NHCbz
	aminomethyl				
3344	2-imidazolinyl-	1	n-Bu	Н	NHCbz
	aminomethyl				
3345	2-imidazolinyl-	1	CO ₂ -n-Bu	н	NHCbz
	aminomethyl				
3346	2-imidazolinyl-	1	CO ₂ -i-Bu	H	NHCbz
	aminomethyl				

3347	2-imidazolinyl-	1	CO ₂ -t-Bu	Н	NHCbz
	aminomethyl				
3348	2-imidazolinyl-	1	Н	Н	NHCbz
	aminomethyl				
3349	2-imidazolinyl-	1	-(CH2)4NH2	Н	NHCbz
	aminomethyl				
3350	2-imidazolinyl-	1	COPh	Н	NHCbz
	aminomethyl				
3351	2-imidazolinyl-	1	so ₂ -n-Bu	Н	NHCbz
	aminomethyl				
3352	2-	1	Cbz	Н	NHSO ₂ Ph
	benzimidazolyl-		·		
	aminomethyl				-
3353	2-	1	SO ₂ Ph	н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3354	2-	1	$CO(CH_2)_2Ph$	н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3355	2-	1	Bn	н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3356	2-	1	n-Bu	н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3357	2-	1	COCH ₂ (3-	Н	NHSO ₂ Ph
	benzimidazolyl-		indolyl)		
	aminomethyl				
3358	2-	1	so2-	H	NHSO ₂ Ph
	benzimidazolyl-		(biphenyl)		
	aminomethyl				
3359	2-	1	CO ₂ -n-Bu	Н	NHSO2Ph
	benzimidazolyl-				
	aminomethyl				

3360	2-	1	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3361	2-	1	CO ₂ -t-Bu	Н	NHSO2Ph
	benzimidazolyl-				
	aminomethyl				
3362	2-	1	Н	Н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3363	2-	1	-(CH2)4NH2	Н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3364	2-	1	COPh	Н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3365	2-	1	cyclopropyl-	Н	NHSO2Ph
	benzimidazolyl-		methyl		
	aminomethyl				
3366	2-	1	SO ₂ -n-Bu	Н	NHSO ₂ Ph
	benzimidazolyl-				
	aminomethyl				
3367	2-	1	Cbz	Н	NHSO ₂ -(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				y1)
3368	2-	1	SO ₂ Ph	Н	NHSO ₂ -(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				y1)
3369	2-	1	CO(CH ₂) ₂ Ph	Н	NHSO ₂ -(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				yl)
3370	2-	1	Bn	H	NHSO ₂ -(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				yl)

3371	2-	1	n-Bu	H	NHSO2-(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				yl)
3372	2-	1	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				yl)
3373	2-	1	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				yl)
3374	2-	1	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				yl)
3375	2-	1	н	н	NHSO2-(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				yl)
3376	2-	1	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				yl)
3377	2-	1	COPh	Н	NHSO2-(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				yl)
3378	2-	1	so ₂ -n-Bu	Н	NHSO ₂ -(2,4,6-
	benzimidazolyl-				trimethylphen
	aminomethyl				yl)
3379	2-	1	Cbz	Н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3380	2~	1	SO ₂ Ph	н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3381	2-	1	CO(CH ₂) ₂ Ph	Н	NHCbz
	benzimidazolyl-		•		
	aminomethyl				

3382	2-	1	Bn	Н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3383	2-	1	n-Bu	н	NHCbz
	benzimidazolyl-	-			
	aminomethyl				
3384	2-	1	CO2-n-Bu	Н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3385	2-	1	CO ₂ -i-Bu	н	NHCbz
	benzimidazolyl-				
	aminomethyl		•		
3386	2-	1	CO ₂ -t-Bu	н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3387	2-	1	н	Н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3388	2-	1	-(CH2)4NH2	Н	NHCbz
	benzimidazolyl-		•		
	aminomethyl				
3389	2-	1	COPh	н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3390	2-	1	so ₂ -n-Bu	Н	NHCbz
	benzimidazolyl-				
	aminomethyl				
3391	7-aza-2-	1	Cbz	H	NHSO2Ph
	benzimidazolyl				
3392	7-aza-2-	1	SO ₂ Ph	Н	NHSO ₂ Ph
	benzimidazolyl				
3393	7-aza-2-	1	$CO(CH_2)_2Ph$	Н	$NHSO_2Ph$
	benzimidazolyl				
3394	7-aza-2-	1	Bn	Н	NHSO2Ph
	benzimidazolyl				

3395	7-aza-2-	1	n-Bu	н	NHSO ₂ Ph
	benzimidazolyl				
3396	7-aza-2-	1	COCH ₂ (3-	Н	NHSO ₂ Ph
	benzimidazolyl		indolyl)		
3397	7-aza-2-	1	SO2-	н	NHSO ₂ Ph
	benzimidazolyl		(biphenyl)		
3398	7-aza-2-	1	CO ₂ -n-Bu	Н	NHSO2Ph
	benzimidazolyl				
3399	7-aza-2-	1	CO ₂ -i-Bu	н	NHSO2Ph
	benzimidazolyl				
3400	7-aza-2-	1	CO2-t-Bu	н	NHSO2Ph
	benzimidazolyl				
3401	7-aza-2-	1	н	Н	NHSO2Ph
	benzimidazolyl				
3402	7-aza-2-	1	-(CH ₂)4NH ₂	н	NHSO ₂ Ph
	benzimidazolyl				
3403	7-aza-2-	1	COPh	H	NHSO2Ph
	benzimidazolyl				
3404	7-aza-2-	1	cyclopropyl-	Н	NHSO ₂ Ph
	benzimidazolyl		methyl		
3405	7-aza-2-	1	SO ₂ -n-Bu	Н	NHSO ₂ Ph
	benzimidazolyl				
3406	7-aza-2-	1	Cbz	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
	•				yl)
3407	7-aza-2-	1	SO ₂ Ph	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					y1)
3408	7-aza-2-	1	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3409	7-aza-2-	1	Bn	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)

3410	7-aza-2-	1	n-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3411	7-aza-2-	1	CO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3412	7-aza-2-	1	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3413	7-aza-2-	1	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					y 1)
3414	7-aza-2-	1	н	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3415	7-aza-2-	1	-(CH ₂) ₄ NH ₂	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3416	7-aza-2-	1	COPh	H	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3417	7-aza-2-	1	so ₂ -n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphen
					yl)
3418	7-aza-2-	1	Cbz	H	NHCbz
	benzimidazolyl				
3419	7-aza-2-	1	SO ₂ Ph	Н	NHCbz
• • • •	benzimidazolyl			ė	
3420	7-aza-2-	1	CO(CH ₂) ₂ Ph	Н	NHCbz
	benzimidazolyl				
3421	7-aza-2-	1	Bn	Н	NHCbz
	benzimidazolyl				
3422	7-aza-2-	1	n-Bu	Н	NHCbz
	benzimidazolyl				

3423	7-aza-2-	1	CO2-n-Bu	н	NHCbz
	benzimidazolyl				
3424	7-aza-2-	1	CO ₂ -i-Bu	Н	NHCbz
	benzimidazolyl				
3425	7-aza-2-	1	CO ₂ -t-Bu	Н	NHCbz
	benzimidazolyl				
3426	7-aza-2-	1	н	Н	NHCbz
	benzimidazolyl				
3427	7-aza-2-	1	-(CH2)4NH2	Н	NHCbz
	benzimidazolyl				
3428	7-aza-2-	1	COPh	н	NHCbz
	benzimidazolyl				
3429	7-aza-2-	1	SO ₂ -n-Bu	Н	NHCbz
	benzimidazolyl				
3430	tetrahydropyrimi	1	Cbz	Н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3431	tetrahydropyrimi	1	SO ₂ Ph	н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3432	tetrahydropyrimi	1	$CO(CH_2)_2Ph$	Н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3433	tetrahydropyrimi	1	Bn ~	Н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3434	tetrahydropyrimi	1	n-Bu	Н	NHSO2Ph
	din-2-				
	ylaminomethyl			•	
3435	tetrahydropyrimi	1	COCH ₂ (3-	H	NHSO ₂ Ph
	din-2-		indoly1)		
	ylaminomethyl				
3436	tetrahydropyrimi	1	SO2-	н	NHSO ₂ Ph
	din-2-		(biphenyl)		
	ylaminomethyl				

3437	tetrahydropyrimi	1	CO ₂ -n-Bu	н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3438	tetrahydropyrimi	1	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3439	tetrahydropyrimi	1	CO ₂ -t-Bu	н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3440	tetrahydropyrimi	1	н	Н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3441	tetrahydropyrimi	1	-(CH ₂) ₄ NH ₂	Н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3442	tetrahydropyrimi	1	COPh	н	NHSO ₂ Ph
	din-2-				
	ylaminomethyl				
3443	tetrahydropyrimi	1	cyclopropyl-	н	NHSO ₂ Ph
	din-2-		methyl		
	ylaminomethyl				
3444	tetrahydropyrimi	1	SO ₂ -n-Bu	H	NHSO2Ph
	din-2-				
	ylaminomethyl				
3445	tetrahydropyrimi	1	Cbz	н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3446	tetrahydropyrimi	1	SO ₂ Ph	н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				y1)
3447	tetrahydropyrimi	1	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)

3448	tetrahydropyrimi	1	Bn	н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				y1)
3449	tetrahydropyrimi	1	n-Bu	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				y 1)
3450	tetrahydropyrimi	1	CO2-n-Bu	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3451	tetrahydropyrimi	1	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl		•		yl)
3452	tetrahydropyrimi	1	CO ₂ -t-Bu	Н	NHSO ₂ -(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3453	tetrahydropyrimi	1	н	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				y 1)
3454	tetrahydropyrimi	1	-(CH ₂)4NH ₂	Н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3455	tetrahydropyrimi	1	COPh	н	NHSO2-(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3456	tetrahydropyrimi	1	so ₂ -n-Bu	Н	NHSO ₂ -(2,4,6-
	din-2-				trimethylphen
	ylaminomethyl				yl)
3457	tetrahydropyrimi	1	Cbz	Н	NHCbz
	din-2-				
	ylaminomethyl				
3458	tetrahydropyrimi	1	SO ₂ Ph	Н	NHCbz
	din-2-				
	ylaminomethyl				

3459	tetrahydropyrimi din-2-	. 1	CO(CH ₂) ₂ Ph	Н	NHCbz	
	ylaminomethyl					
3460	tetrahydropyrimi	1	Bn	н	NHCbz	
	-din-2-	_		••	NACDZ	
	ylaminomethyl					
3461	tetrahydropyrimi	1	n-Bu	Н	NHCbz	
	din-2-			,	MICDZ	
	ylaminomethyl					
3462	tetrahydropyrimi	1	CO ₂ -n-Bu	н	NHCbz	
	din-2-					
	ylaminomethyl					
3463	tetrahydropyrimi	1	CO2-i-Bu	н	NHCbz	
	din-2-					
	ylaminomethyl					
3464	tetrahydropyrimi	1	CO ₂ -t-Bu	Н	NHCbz	
	din-2-					
	ylaminomethyl					
3465	tetrahydropyrimi	1	н	Н	NHCbz	
	din-2-					
	ylaminomethyl					
3466	tetrahydropyrimi	. 1	-(CH ₂) ₄ NH ₂	Н	NHCbz	
	din-2-					
	ylaminomethyl					
3467	tetrahydropyrimi	1	COPh	Н	NHCbz	
	din-2-					
	ylaminomethyl					
3468	imidazol-2-	0	CO ₂ Me	Н	NHSO2-(2,4,6-	592.4
	ylaminomethyl				trimethylphen	
					yl)	
3469	benzamidazol-2-	0	Bn	Н	NHSO2-(2,4,6-	674.3
	ylaminomethyl				trimethylphen	
					yl)	

3470	benzamidazol-2-	0	CO ₂ Me	Н	NHSO2-(2,4,6-	642.3.
	ylaminomethyl				trimethylphen	
					yl)	
3471	benzamidazol-2-	0	CO ₂ Bu	н	NHSO2-(2,4,6-	684.4
	ylaminomethyl				trimethylphen	
					y1)	
3472	imidazol-2-	0	CO ₂ CH ₂ (3-	н	NHSO2-(2,4,6-	669.4
	ylaminomethyl		pyr)		trimethylphen	
					y 1)	
3473	imidazol-2-	0	н	Н	NHSO2-(2,6-	520.3
	ylaminomethyl				trimethylphen	
			•		y l)	
3474	imidazol-2-	0	н	Н	NHSO2biphenyl	568.3
	ylaminomethyl					
3475	imidazolin-2-	0	Cbz	Н	NHSO2(2-	678.1
	ylaminomethyl				naphthyl	
3476	imidazolin-2-	0	H .	Н	NHSO2biphenyl	570.2
	ylaminomethyl					

Table 4

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Ex.	R^1	r	R ¹⁰	R14	R ¹⁵
No.					
4001	2-pyridinylamino- methyl	0	Cbz	н ,	NHSO2Ph
4002	2-pyridinylamino- methyl	Ó	SO ₂ Ph	н	NHSO2Ph
4003	2-pyridinylamino- methyl	0	CO(CH ₂) ₂ Ph	н	NHSO2Ph
4004	2-pyridinylamino- methyl	0	Bn	н	NHSO2Ph
4005	2-pyridinylamino- methyl	0	n-Bu	н	NHSO ₂ Ph
4006	2-pyridinylamino- methyl	0	COCH ₂ (3-indolyl)	н	NHSO ₂ Ph
4007	2-pyridinylamino- methyl	0	SO2-	н	NHSO ₂ Ph
4008	2-pyridinylamino- methyl	0	CO ₂ -n-Bu	н	NHSO ₂ Ph
4009	2-pyridinylamino- methyl	0	CO ₂ -i-Bu	н	NHSO ₂ Ph
4010	2-pyridinylamino- methyl	0	CO ₂ -t-Bu	н	NHSO ₂ Ph
4011	2-pyridinylamino- methyl	0	н	н	NHSO ₂ Ph
4012	2-pyridinylamino- methyl	0	-(CH ₂) ₄ NH ₂	н	NHSO ₂ Ph

4013	2-pyridinylamino-	0	COPh	Н	NHSO2Ph
	methyl				
4014	2-pyridinylamino-	0	cyclopropy	Н	NHSO2Ph
	methyl		1-methy1		
4015	2-pyridinylamino-	0	SO ₂ -n-Bu	н	NHSO ₂ Ph
	methyl				
4016	2-pyridinylamino-	0	Cbz	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4017	2-pyridinylamino-	0	SO ₂ Ph	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4018	2-pyridinylamino-	0	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4019	2-pyridinylamino-	0	Bn	н -	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4020	2-pyridinylamino-	0	n-Bu	H	NHSO2-(2,4,6-
1	methyl				trimethylphenyl)
4021	2-pyridinylamino-	0	CO2-n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4022	2-pyridinylamino-	0	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	methyl		•		trimethylphenyl)
4023	2-pyridinylamino-	0	CO ₂ -t-Bu	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4024	2-pyridinylamino-	0	н	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4025	2-pyridinylamino-	0	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4026	2-pyridinylamino-	0	COPh	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4027	2-pyridinylamino-	0	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4028	2-pyridinylamino-	0	Cbz	Н	NHCbz
	methyl				
4029	2-pyridinylamino-	0	SO ₂ Ph	н	NHCbz
	methyl				

4030	2-pyridinylamino- methyl	. 0	CO(CH ₂) ₂ Ph	н	NHCbz
4031	2-pyridinylamino- methyl	0	Bn	н	NHCbz
4032	-	0	n-Bu	н	NHCbz
4033	•	0	CO ₂ -n-Bu	н	NHCbz
4034	_	0	CO ₂ -i-Bu	н	NHCbz
4035	_	0	CO ₂ -t-Bu	Ħ	NHCbz
4036	2-pyridinylamino- methyl	0	Н	н .	NHCbz
4037	2-pyridinylamino- methyl	0	-(CH ₂) ₄ NH ₂	н	NHCbz
4038	2-pyridinylamino- methyl	0	COPh	н	NHCbz
4039	2-pyridinylamino- methyl	0	SO ₂ -n-Bu	н	NHCbz
4040	2-imidazolylamino- methyl	0	Cbz	н	NHSO ₂ Ph
4041	2-imidazolylamino- methyl	0	SO ₂ Ph	н	NHSO2Ph
4042	2-imidazolylamino- methyl	0	CO(CH ₂) ₂ Ph	Н	NHSO2Ph
4043	2-imidazolylamino- methyl	0	Bn	н	NHSO ₂ Ph
4044	2-imidazolylamino- methyl	0	n-Bu	н	NHSO ₂ Ph
4045	2-imidazolylamino- methyl	0	COCH ₂ (3-indoly1)	н	NHSO ₂ Ph
4046	2-imidazolylamino-	0	502-	н	NHSO ₂ Ph
	methyl	-	(biphenyl)	**	MIGOZEII

4047	2-imidazolylamino- methyl	0	CO ₂ -n-Bu	Н	NHSO ₂ Ph
4048	2-imidazolylamino- methyl	0	CO ₂ -i-Bu	н	NHSO ₂ Ph
4049	2-imidazolylamino- methyl	0	CO ₂ -t-Bu	Н	NHSO2Ph
4050	2-imidazolylamino- methyl	0	Н	н	NHSO ₂ Ph
4051	2-imidazolylamino- methyl	0	-(CH ₂) ₄ NH ₂	Н	NHSO ₂ Ph
4052	2-imidazolylamino- methyl	0	COPh	Н	NHSO ₂ Ph
4053	2-imidazolylamino- methyl	0	cyclopropy l-methyl	Н	NHSO ₂ Ph
4054	2-imidazolylamino- methyl	0	SO ₂ -n-Bu	н	NHSO ₂ Ph
4055	2-imidazolylamino- methyl	0	Cbz	Н	NHSO ₂ -(2,4,6-trimethylphenyl)
4056	2-imidazolylamino- methyl	0	SO ₂ Ph	Н	NHSO ₂ -(2,4,6- trimethylphenyl)
4057	2-imidazolylamino- methyl	0	CO(CH ₂) ₂ Ph	н	NHSO ₂ -(2,4,6- trimethylphenyl)
4058	2-imidazolylamino- methyl	0	Bn	н	NHSO ₂ -(2,4,6- trimethylphenyl)
4059	2-imidazolylamino- methyl	0	n-Bu	н	NHSO ₂ -(2,4,6- trimethylphenyl)
4060	2-imidazolylamino- methyl	0	CO ₂ -n-Bu	н	NHSO ₂ -(2,4,6- trimethylphenyl)
4061	2-imidazolylamino- methyl		CO ₂ -i-Bu	н	NHSO ₂ -(2,4,6- trimethylphenyl)
4062	2-imidazolylamino- methyl	0	CO ₂ -t-Bu	н	NHSO ₂ -(2,4,6- trimethylphenyl)
4063	2-imidazolylamino-	0	н	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)

4064	2-imidazolylamino-	ο.	-(CH ₂) ₄ NH ₂	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4065	2-imidazolylamino-	0	COPh	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4066	2-imidazolylamino-	0	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4067	2-imidazolylamino-	0	Cbz	H	NHCbz
	methyl			-	
4068	2-imidazolylamino-	0	SO ₂ Ph	н .	NHCbz
	methyl				
4069	2-imidazolylamino-	0	CO(CH ₂) ₂ Ph	н	NHCbz
	methyl				
4070	2-imidazolylamino-	0	Bn	H ·	NHCbz
	methyl				
4071	2-imidazolylamino-	0	n-Bu	н	NHCbz
	methyl				
4072	2-imidazolylamino-	0	CO2-n-Bu	H	NHCbz
	methyl				
4073	2-imidazolylamino-	0	CO ₂ -i-Bu	н	NHCbz
	methyl				
4074	2-imidazolylamino-	0	CO ₂ -t-Bu	Н	NHCbz
	methyl				,
4075	2-imidazolylamino-	0	Н	н	NHCbz
	methyl				
4076	2-imidazolylamino-	0	-(CH2)4NH2	н	NHCbz
	methyl				
4077	2-imidazolylamino-	0	COPh	н	NHCbz
	methyl				
4078	2-imidazolylamino-	0	SO ₂ -n-Bu	н	NHCbz
	methyl				
4079	2-imidazolinyl-	0	Cbz	н	NHSO ₂ Ph
	aminomethyl				
4080	2-imidazolinyl-	0	SO ₂ Ph	Н	NHSO ₂ Ph
	aminomethyl				

4081	2-imidazolinyl-	0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
	aminomethyl				
4082	2-imidazolinyl-	0	Bn	Н	NHSO ₂ Ph
	aminomethyl				
4083	2-imidazolinyl-	0	n-Bu	Н	NHSO2Ph
	aminomethyl				
4084	2-imidazolinyl-	0	COCH ₂ (3-	н	NHSO2Ph
	aminomethyl		indolyl)		
4085	2-imidazolinyl-	0	SO2-	Н	NHSO2Ph
	aminomethyl		(biphenyl)		
4086	2-imidazolinyl-	0	CO2-u-Br	H .	NHSO ₂ Ph
	aminomethyl				
4087	2-imidazolinyl-	0	CO2-i-Bu	н	NHSO2Ph
	aminomethyl				
4088	2-imidazolinyl-	0	CO ₂ -t-Bu	н	NHSO2Ph
	aminomethyl				
4089	2-imidazolinyl-	0	н	Н	NHSO2Ph
	aminomethyl				
4090	2-imidazolinyl-	0	-(CH2)4NH2	Н	NHSO ₂ Ph
	aminomethyl				
4091	2-imidazolinyl-	0	COPh	Н	NHSO ₂ Ph
	aminomethyl	·			
4092	2-imidazolinyl-	0	cyclopropy	н	NHSO ₂ Ph
	aminomethyl		l-methyl		
4093	2-imidazolinyl-	0	SO ₂ -n-Bu	н	NHSO ₂ Ph
	aminomethyl				
4094	2-imidazolinyl-	0	Cbz	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4095	2-imidazolinyl-	0	SO ₂ Ph	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4096	2-imidazolinyl-	0	$CO(CH_2)_2Ph$	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4097	2-imidazolinyl-	0	Bn	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)

4098	2-imidazolinyl-	0	n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4099	2-imidazolinyl-	0	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4100	2-imidazolinyl-	0	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	aminomethy1				trimethylphenyl)
4101	2-imidazolinyl-	0	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4102	2-imidazolinyl-	0	н	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4103	2-imidazolinyl-	0	-(CH ₂) ₄ NH ₂	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4104	2-imidazolinyl-	0	COPh	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4105	2-imidazolinyl-	0	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4106	2-imidazolinyl-	0	Cbz	н	NHCbz
	aminomethyl				
4107	2-imidazolinyl-	0	SO ₂ Ph	н	NHCbz
	aminomethyl				
4108	2-imidazolinyl-	0	CO(CH ₂) ₂ Ph	н	NHCbz
	aminomethyl				
4109	2-imidazolinyl-	0	Bn	н	NHCbz
	aminomethyl				
4110	2-imidazolinyl-	0	n-Bu	Н	NHCbz
•	aminomethyl				
4111	2-imidazolinyl-	0	CO2-n-Bu	н	NHCbz
	aminomethyl				
4112	2-imidazolinyl-	0	CO ₂ -i-Bu	Н	NHCbz
	aminomethyl				
4113	2-imidazolinyl-	0	CO2-t-Bu	Н	NHCbz
	aminomethyl				
4114	2-imidazolinyl-	0	Н	Н	NHCbz
	aminomethyl				

4115	2-imidazolinyl- aminomethyl	0	-(CH ₂) ₄ NH ₂	Н	NHCbz
4116	2-imidazolinyl-	0	COPh	Н	NHCbz
	aminomethyl				
4117	2-imidazolinyl-	0	SO ₂ -n-Bu	H	NHCbz
4440	aminomethyl				
4118	2-benzimidazolyl-	0	Cbz	н	NHSO ₂ Ph
4110	aminomethyl	^	SO _e Dh)TIGO DI
4119	2-benzimidazolyl-	0	SO ₂ Ph	Н	NHSO ₂ Ph
4120	aminomethyl	^	CO/CUa) a Dh	••	NTIGO DI
4120	2-benzimidazolyl- aminomethyl	0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
4121	2-benzimidazolyl-	0	Bn	н	NHSO ₂ Ph
	aminomethyl			••	
4122	2-benzimidazolyl-	0	n-Bu	н	NHSO ₂ Ph
	aminomethyl				
4123	2-benzimidazolyl-	0	COCH ₂ (3-	н	NHSO ₂ Ph
•	aminomethyl		indolyl)		_
4124	2-benzimidazolyl-	0	SO2-	н	NHSO ₂ Ph
	aminomethyl		(biphenyl)		
4125	2-benzimidazolyl-	0	CO ₂ -n-Bu	н	NHSO2Ph
	aminomethyl				
4126	2-benzimidazoly1-	0	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	aminomethyl				
4127	2-benzimidazolyl-	0	CO ₂ -t-Bu	Н	NHSO ₂ Ph
•	aminomethyl				
4128	2-benzimidazolyl-	0	Н	Н	NHSO ₂ Ph
	aminomethyl				
4129	2-benzimidazolyl-	0	-(CH2)4NH2	Н	NHSO ₂ Ph
	aminomethyl				
4130	2-benzimidazolyl-	0	COPh	Н	NHSO ₂ Ph
	aminomethyl				
4131	2-benzimidazolyl-	0	cyclopropy	Н	NHSO ₂ Ph
	aminomethyl		l-methyl		

4132		(SO ₂ -n-Bu	н	NHSO ₂ Ph
4122	aminomethyl				
4133		C) Cbz	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4134		0	SO ₂ Ph	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4135	2-benzimidazolyl-	0	CO(CH ₂) ₂ Ph	H	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4136	2-benzimidazolyl-	0	Bn	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4137	2-benzimidazolyl-	0	n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4138	2-benzimidazoly1-	0	CO2-n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4139	2-benzimidazolyl-	0	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4140	2-benzimidazoly1-	0	CO ₂ -t-Bu	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
4141	2-benzimidazolyl-	0	н	н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
4142	2-benzimidazolyl-	0	-(CH ₂) ₄ NH ₂	Н	NHSO ₂ -(2,4,6-
	aminomethyl		- · ·	••	trimethylphenyl)
4143	2-benzimidazolyl-	0	COPh	н	NHSO ₂ -(2,4,6-
	aminomethyl			••	trimethylphenyl)
4144	2-benzimidazolyl-	0	SO ₂ -n-Bu	н	NHSO ₂ -(2,4,6-
	aminomethyl		•	••	
4145	2-benzimidazolyl-	0	Cbz	н	trimethylphenyl)
	aminomethyl		CD 2	п	NHCbz
4146	2-benzimidazoly1-	0	SO ₂ Ph	77	
	aminomethyl	•	202111	H	NHCbz
4147	2-benzimidazolyl-	0	CO(CH ₂) ₂ Ph		
	aminomethyl	U	CO (CH2) 2PH	Н	NHCbz
4148	2-benzimidazolyl-	•	_		
1740		0	Bn	Н	NHCbz
	aminomethyl				

4149	2-benzimidazolyl- aminomethyl	0 ·	n-Bu	н	NHCbz
4150	2-benzimidazolyl-	0	CO ₂ -n-Bu	Н	NHCbz
4151	aminomethyl 2-benzimidazolyl-	0	CO ₂ -i-Bu	H	NHCbz
4152	aminomethyl 2-benzimidazolyl-	0	CO ₂ -t-Bu	н	NHCbz
4153	aminomethyl 2-benzimidazolyl-	0	н	н	NHCbz
4154	aminomethyl 2-benzimidazolyl-	0	-(CH ₂) ₄ NH ₂	н	NHCbz
4155	aminomethyl 2-benzimidazolyl-	0	COPh	н	NHCbz
4156	aminomethyl 2-benzimidazolyl-	0	SO ₂ -n-Bu	н	NHCbz
4157	aminomethyl 7-aza-2-	0	Cbz	н	NHSO2Ph
4158	benzimidazolyl 7-aza-2-	0	SO ₂ Ph	н	NHSO2Ph
4159	benzimidazolyl 7-aza-2-	0	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
4160	benzimidazolyl 7-aza-2-	0	Bn	Н	NHSO ₂ Ph
4161	benzimidazolyl 7-aza-2-	0	n-Bu	н	NHSO ₂ Ph
4162	benzimidazolyl 7-aza-2-	0	СОСН2 (3-	н	NHSO ₂ Ph
4163	benzimidazolyl 7-aza-2-	0	indolyl) SO2-	н	NHSO ₂ Ph
4164	benzimidazolyl	0	(biphenyl) CO ₂ -n-Bu	н	NHSO ₂ Ph
	benzimidazolyl		CO ₂ -i-Bu	н	NHSO ₂ Ph
4165	7-aza-2- benzimidazolyl	0	CO2-1-54	п	

4166	7-aza-2-	. 0	CO ₂ -t-Bu	. н	NHSO ₂ Ph
	benzimidazolyl				
4167	7-aza-2-	0	н	н	NHSO ₂ Ph
	benzimidazolyl				
4168	7-aza-2-	0	-(CH2)4NH2	н	NHSO ₂ Ph
	benzimidazolyl	•			
4169	7-aza-2-	0	COPh	н	NHSO ₂ Ph
	benzimidazolyl				
4170	7-aza-2-	0	cyclopropy	н	NHSO2Ph
	benzimidazolyl		1-methyl		-
4171	7-aza-2-	0	so ₂ -n-Bu	н	NHSO ₂ Ph
	benzimidazolyl				
4172	7-aza-2-	0	Cbz	H	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4173	7-aza-2-	0	so ₂ Ph	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4174	7-aza-2-	0	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4175	7-aza-2-	0	· Bn	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4176	7-aza-2-	0	n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4177	7-aza-2-	0	CO2-n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4178	7-aza-2-	0	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4179	7-aza-2-	0	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4180	7-aza-2-	0	н	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4181	7-aza-2-	0	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4182	7-aza-2-	0	COPh	н	NHSO ₂ -(2,4,6-
	benzimidazolyl				trimethylphenyl)
•					7 -5

4183	7-aza-2-	0	SO ₂ -n-Bu	H	NHSO2-(2,4.6-
	benzimidazolyl				trimethylphenyl)
4184	7-aza-2-	0	Cbz	Н	NHCbz
	benzimidazolyl				
4185	7-aza-2-	0	SO ₂ Ph	Н	NHCbz
	benzimidazolyl				
4186	7-aza-2-	0	CO(CH ₂) ₂ Ph	Н	NHCbz
	benzimidazolyl				
4187	7-aza-2-	0	Bn	н	NHCbz
	benzimidazolyl				
4188	7-aza-2-	0	n-Bu	Н	NHCbz
	benzimidazolyl				
4189	7-aza-2-	0	CO ₂ -n-Bu	Н	NHCbz
	benzimidazolyl				
4190	7-aza-2-	0	CO ₂ -i-Bu	Н	NHCbz
	benzimidazolyl				
4191	7-aza-2-	0	CO ₂ -t-Bu	H	NHCbz
	benzimidazolyl				
4192	7-aza-2-	0	н	Н	NHCbz
	benzimidazolyl				
4193	7-aza-2-	0	-(CH2)4NH2	Н	NHCbz
	benzimidazolyl				
4194	7-aza-2-	0	COPh	Н	NHCbz
	benzimidazolyl				
4195	7-aza-2-	0	so ₂ -n-Bu	Н	NHCbz
	benzimidazolyl				
4196	tetrahydropyrimidin	0	Cbz	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
4197	tetrahydropyrimidin	0	SO ₂ Ph	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
4198	tetrahydropyrimidin	0	$CO(CH_2)_2Ph$	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
4199	tetrahydropyrimidin	0	Bn	Н	NHSO ₂ Ph
	-2-ylaminomethyl				

4200	,	0	n-Bu	н	NHSO ₂ Ph
4201	-2-ylaminomethyl	^	COCU- /2		17100
4201	tetrahydropyrimidin-2-ylaminomethyl	0	COCH ₂ (3-	Н	NHSO ₂ Ph
4202	•	^	indolyl)		
4202		0	- S02-	Н	NHSO ₂ Ph
4203	-2-ylaminomethyl		(biphenyl)		
4203		0	CO ₂ -n-Bu	. Н	NHSO ₂ Ph
4204	-2-ylaminomethyl	•	CO- i Du		
4204		0	CO ₂ -i-Bu	Н	NHSO ₂ Ph
420E	-2-ylaminomethyl	^	CO		
4203	tetrahydropyrimidin2-ylaminomethyl	0	CO ₂ -t-Bu	н	NHSO ₂ Ph
4206	_	0	н	••)*************************************
4200	-2-ylaminomethyl	Ü	п	H ·	NHSO ₂ Ph
4207	tetrahydropyrimidin	0	-(CH ₂) ₄ NH ₂	••)#IGO PI
	-2-ylaminomethyl	Ü	- (CH2) 4NH2	Н	NHSO ₂ Ph
4208	tetrahydropyrimidin	0	COPh	••	\T:00 DI
1200	-2-ylaminomethyl	Ü	COPII	Н	NHSO ₂ Ph
4209	tetrahydropyrimidin	0	oval opvani.	**	NTIGO Ph
1207	-2-ylaminomethyl	U	cyclopropy 1-methyl	Н	NHSO ₂ Ph
4210	tetrahydropyrimidin	0	SO ₂ -n-Bu	н	NHSO2Ph
	-2-ylaminomethyl	Ŭ	202 24	л	MN302FII
4211	tetrahydropyrimidin	0	Cbz	н	NUSO12 4 6
	-2-ylaminomethyl	Ū	CDZ	п	NHSO ₂ -(2,4,6-
4212	tetrahydropyrimidin	0	SO ₂ Ph	н	NHSO ₂ -(2,4,6-
	-2-ylaminomethyl		5521	n	
4213	tetrahydropyrimidin	0	CO(CH ₂) ₂ Ph	н	trimethylphenyl) NHSO ₂ -(2,4,6-
	-2-ylaminomethyl	•	50,0112,7211	n	
4214	tetrahydropyrimidin	0	Bn	н	NHSO ₂ -(2,4,6-
	-2-ylaminomethyl	•	5	п	
4215	tetrahydropyrimidin	0	n-Bu	н	trimethylphenyl) NHSO ₂ -(2,4,6-
	-2-ylaminomethyl	•	54	п	
4216	tetrahydropyrimidin	0	CO ₂ -n-Bu	н	Trimethylphenyl) NHSO ₂ -(2,4,6-
	-2-ylaminomethyl	•	442 .1 DG	п	
	~ lraminomeenly				trimethylphenyl)

4217	tetrahydropyrimidin	0	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4218	tetrahydropyrimidin	0	CO ₂ -t-Bu	H	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4219	tetrahydropyrimidin	0	н	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4220	tetrahydropyrimidin	0	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4221	tetrahydropyrimidin	0	COPh	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl		•		trimethylphenyl)
4222	tetrahydropyrimidin	0	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl		•		trimethylphenyl)
4223	tetrahydropyrimidin	0	Cbz	н	NHCbz
	-2-ylaminomethyl				
4224	tetrahydropyrimidin	0	SO ₂ Ph	H	NHCbz
	-2-ylaminomethyl				
4225	tetrahydropyrimidin	0	CO(CH ₂) ₂ Ph	Н	NHCbz
	-2-ylaminomethyl				
4226	tetrahydropyrimidin	0	Bn	Н	NHCbz
	-2-ylaminomethyl				
4227	tetrahydropyrimidin	0	n-Bu	Н	NHCbz
	-2-ylaminomethyl				
4228	tetrahydropyrimidin	0	CO2-n-Bu	Н	NHCbz
	-2-ylaminomethyl				
4229	tetrahydropyrimidin	0	CO ₂ -i-Bu	Н	NHCbz
	-2-ylaminomethyl				
4230	tetrahydropyrimidin	0	CO ₂ -t-Bu.	H	NHCbz
	-2-ylaminomethyl				
4231	tetrahydropyrimidin	0	н	Н	NHCbz
	-2-ylaminomethyl				
4232	tetrahydropyrimidin	0	-(CH2)4NH2	Н	NHCbz
	-2-ylaminomethyl				
4233	tetrahydropyrimidin	0	COPh	Н	NHCbz
	-2-ylaminomethyl				

4234	tetrahydropyrimidin	0	so ₂ -n-Bu	н	NHCbz
	-2-ylaminomethyl				
4235	2-pyridinylamino-	1	Cbz	Н	NHSO ₂ Ph
	methyl				
4236	2-pyridinylamino-	1	so ₂ Ph	Н	NHSO ₂ Ph
	methyl				
4237	2-pyridinylamino-	1	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
	methyl				
4238	2-pyridinylamino-	1	Bn	Н	NHSO2Ph
	methyl				
4239	2-pyridinylamino-	1	n-Bu	Н	NHSO2Ph
	methyl				
4240	2-pyridinylamino-	1	COCH ₂ (3-	н .	NHSO2Ph
	methyl		indolyl)		
4241	2-pyridinylamino-	1	SO2-	H	NHSO ₂ Ph
	methyl		(biphenyl)		
4242	2-pyridinylamino-	1	CO ₂ -n-Bu	H	NHSO ₂ Ph
	methyl				
4243	2-pyridinylamino-	1	CO ₂ -i-Bu	H.	NHSO ₂ Ph
	methyl				•
4244	2-pyridinylamino-	1	CO ₂ -t-Bu	Н	NHSO2Ph
	methyl				
4245	2-pyridinylamino-	1	н	н	NHSO2Ph
	methyl				
4246	2-pyridinylamino-	1	-(CH2)4NH2	н	NHSO2Ph
	methyl				
4247	2-pyridinylamino-	1	COPh	н	NHSO2Ph
	methyl				
4248	2-pyridinylamino-	1	cyclopropy	н	NHSO2Ph
	methyl		l-methyl		
4249	2-pyridinylamino-	1	SO ₂ -n-Bu	Н	NHSO ₂ Ph
	methyl				
4250	2-pyridinylamino-	1	Cbz	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)

4251	2-pyridinylamino-	1	SO ₂ Ph	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4252	2-pyridinylamino-	1	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-
	methyl			•	trimethylphenyl)
4253	2-pyridinylamino-	1	Bn	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4254	2-pyridinylamino-	1	n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4255	2-pyridinylamino-	1	CO2-n-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4256	2-pyridinylamino-	1	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	methyl		-		trimethylphenyl)
4257	2-pyridinylamino-	1	CO ₂ -t-Bu	H ·	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4258	2-pyridinylamino-	1	н	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4259	2-pyridinylamino-	1	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	methyl	٠			trimethylphenyl)
4260	2-pyridinylamino-	1	COPh	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4261	2-pyridinylamino-	1	so ₂ -n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
4262	2-pyridinylamino-	1	Cbz	Н	NHCbz
	methyl				
4263	2-pyridinylamino-	1	SO ₂ Ph	Н	NHCbz
	methyl				
4264	2-pyridinylamino-	1	CO(CH ₂) ₂ Ph	Н	NHCbz
	methyl				
4265	2-pyridinylamino-	1	Bn	Н	NHCbz
	methyl				·
4266	2-pyridinylamino-	1	n-Bu	Н	NHCbz
	methyl				
4267	2-pyridinylamino-	1	CO2-n-Bu	н	NHCbz
	methyl				

4268	2-pyridinylamino- methyl	1	CO ₂ -i-Bu	н	NHCbz
4269	-	1	CO ₂ -t-Bu	н	NHCbz
4270	-	1	н	н	NHCbz
4271	-	1	-(CH ₂) ₄ NH ₂	н	NHCbz
4272	•	1	COPh	н	NHCbz
4273	_	1 .	so ₂ -n-Bu	н	NHCbz
4274	2-imidazolylamino- methyl	1	Cbz	Н	NHSO2Ph
4275	2-imidazolylamino- methyl	1	so ₂ Ph	н	NHSO ₂ Ph
4276	2-imidazolylamino- methyl	1	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
4277	2-imidazolylamino- methyl	1	Bn	н	NHSO ₂ Ph
4278	2-imidazolylamino- methyl	1	n-Bu	н	NHSO ₂ Ph
4279	2-imidazolylamino- methyl	1	COCH ₂ (3-	н	NHSO2Ph
4280	2-imidazolylamino- methyl	1	SO ₂ -	н	NHSO2Ph
4281	2-imidazolylamino- methyl	1	CO ₂ -n-Bu	н	NHSO2Ph
4282	2-imidazolylamino- methyl	1	CO ₂ -i-Bu	н	NHSO ₂ Ph
4283	2-imidazolylamino- methyl	1	CO ₂ -t-Bu	н	NHSO ₂ Ph
4284	2-imidazolylamino- methyl	1	н	н	NHSO ₂ Ph

4285	2-imidazolylamino- methyl	1	-(CH ₂) ₄ NH ₂	Н	NHSO ₂ Ph
4286	2-imidazolylamino- methyl	1	COPh	Н	NHSO ₂ Ph
4287	2-imidazolylamino-	1	cyclopropy	н	NHSO ₂ Ph
4288	methyl 2-imidazolylamino-	1	l-methyl SO ₂ -n-Bu	Н	NHSO ₂ Ph
4289	methyl 2-imidazolylamino-	1	Cbz	н	NHSO ₂ -(2,4,6-
4290	methyl 2-imidazolylamino-	1	so ₂ Ph	н	trimethylphenyl) NHSO ₂ -(2,4,6-
4291	methyl 2-imidazolylamino-	1	CO(CH ₂) ₂ Ph	н ·	trimethylphenyl) NHSO ₂ -(2,4,6-
4292	methyl 2-imidazolylamino-	1	Bn	н	NHSO ₂ -(2,4,6-
4293	methyl 2-imidazolylamino-	1	n-Bu	н	NHSO ₂ -(2,4,6-
4294	methyl 2-imidazolylamino-	1	CO ₂ -n-Bu	н	trimethylphenyl) NHSO ₂ -(2,4,6-
	methyl 2-imidazolylamino-	1	CO ₂ -i-Bu	н	trimethylphenyl) NHSO2-(2,4,6-
4295	methyl		_		trimethylphenyl) NHSO2-(2,4,6-
4296	2-imidazolylamino- methyl	1	CO ₂ -t-Bu	Н	trimethylphenyl)
4297	2-imidazolylamino- methyl	1	Н	н	NHSO ₂ -(2,4,6- trimethylphenyl)
4298	2-imidazolylamino- methyl	1	-(CH ₂) ₄ NH ₂	н	NHSO ₂ -(2,4,6- trimethylphenyl)
4299	2-imidazolylamino- methyl	1	COPh	Н	NHSO ₂ -(2,4,6- trimethylphenyl)
4300	2-imidazolylamino-	1	SO ₂ -n-Bu	н	NHSO ₂ -(2,4,6-trimethylphenyl)
4301	methyl 2-imidazolylamino-	1	Cbz	н	NHCbz
	methyl				

4303 2-imidazolylamino- 1 CO(CH ₂) ₂ Ph H	NHCbz
methyl	
4304 2-imidazolylamino- 1 Bn н methyl	NHCbz
4305 2-imidazolylamino- 1 n-Bu H - methyl	NHCbz
4306 2-imidazolylamino- 1 CO ₂ -n-Bu H methyl	NHCbz
4307 2-imidazolylamino- 1 CO ₂ -i-Bu H methyl	NHCbz
4308 2-imidazolylamino- 1 CO ₂ -t-Bu H methyl	NHCbz
4309 2-imidazolylamino- 1 H H methyl	NHCbz
4310 2-imidazolylamino- 1 -(CH ₂) ₄ NH ₂ H methyl	NHCbz
4311 2-imidazolylamino- 1 COPh H methyl	NHCbz
4312 2-imidazolylamino- 1 SO ₂ -n-Bu H methyl	NHCbz
4313 2-imidazolinyl- 1 Cbz H aminomethyl	NHSO2Ph
4314 2-imidamalimul 4 go pl	NHSO2Ph
4315 2-1-14-2-1	NHSO2Ph
4316 2-imidonoli	NHSO2Ph
4317 2-imidagalimul	NHSO ₂ Ph
4318 2-imidamalimul 4 gogy (2	NHSO2Ph

4319	2-imidazolinyl-	1 -	so ₂ -	н	NHSO ₂ Ph
	aminomethyl		(biphenyl)		
4320	2-imidazolinyl-	1	CO ₂ -n-Bu	Н	NHSO2Ph
	aminomethyl				
4321	2-imidazolinyl-	1	CO ₂ -i-Bu	H	NHSO ₂ Ph
	aminomethyl				
4322	2-imidazolinyl-	1	CO ₂ -t-Bu	н	NHSO2Ph
	aminomethyl				
4323	2-imidazolinyl-	1	н	н	NHSO2Ph
	aminomethyl				
4324	2-imidazolinyl-	1	-(CH2)4NH2	Н	NHSO2Ph
	aminomethyl				
4325	2-imidazolinyl-	1	COPh	н	NHSO ₂ Ph
	aminomethyl				
4326	2-imidazolinyl-	1	cyclopropy	Н	NHSO ₂ Ph
	aminomethyl		l-methyl		
4327	2-imidazolinyl-	1	so ₂ -n-Bu	Н	NHSO ₂ Ph
	aminomethyl				
4328	2-imidazolinyl-	1	Cbz	Н	NHSO2-(2,4,6-
	aminomethyl			•	trimethylphenyl)
4329	2-imidazolinyl-	1	SO ₂ Ph	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4330	2-imidazolinyl-	1	CO(CH ₂) ₂ Ph	H	NHSO ₂ -{2,4,6-
	aminomethyl				trimethylphenyl)
4331	2-imidazolinyl-	1	Bn	Н	$NHSO_2 - (2,4,6-$
	aminomethyl				trimethylphenyl)
4332	2-imidazolinyl-	1	n-Bu	Н	$NHSO_2 - (2,4,6-$
	aminomethyl				trimethylphenyl)
4333	2-imidazolinyl-	1	CO ₂ -n-Bu	н	$NHSO_2 - (2, 4, 6 -$
	aminomethyl				trimethylphenyl)
4334	2-imidazolinyl-	1	CO ₂ -i-Bu	н	$NHSO_2 - (2, 4, 6 -$
	aminomethyl				trimethylphenyl)
4335	2-imidazolinyl-	1	CO ₂ -t-Bu	н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)

4336	2-imidazolinyl-	1	H	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4337	2-imidazolinyl-	1	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4338	2-imidazolinyl-	1	COPh	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4339	2-imidazolinyl-	1	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl			•	trimethylphenyl)
4340	2-imidazolinyl-	1	Cbz	н	NHCbz
	aminomethyl				
4341	2-imidazolinyl-	1	SO ₂ Ph	н	NHCbz
	aminomethyl				
4342	2-imidazolinyl-	1	CO(CH ₂) ₂ Ph	Н	NHCbz
	aminomethyl				
4343	2-imidazolinyl-	1	Bn	н	NHCbz
	aminomethyl				
4344	2-imidazolinyl-	1	n-Bu	н	NHCbz
	aminomethyl				
4345	2-imidazolinyl-	1	CO ₂ -n-Bu	н	NHCbz
	aminomethyl				
4346	2-imidazolinyl-	1	CO ₂ -i-Bu	н	NHCbz
	aminomethyl				
4347	2-imidazolinyl-	1	CO ₂ -t-Bu	Н	NHCbz
	aminomethyl				
4348	2-imidazolinyl-	1	н	н	NHCbz
	aminomethyl				
4349	2-imidazolinyl-	1	-(CH2)4NH2	н	NHCbz
	aminomethyl				
4350	2-imidazolinyl-	1	COPh	H .	NHCbz
	aminomethyl				
4351	2-imidazolinyl-	1	SO ₂ -n-Bu	Н	NHCbz
	aminomethyl				
4352	2-benzimidazolyl-	1	Cbz	н.	NHSO2Ph
	aminomethyl				-

4353	2-benzimidazolyl- aminomethyl	1	SO ₂ Ph	Н	NHSO2Ph
4354	2-benzimidazolyl- aminomethyl	1	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
4355	2-benzimidazolyl- aminomethyl	1	Bn	н	NHSO ₂ Ph
4356	2-benzimidazolyl- aminomethyl	1	n-Bu	н	NHSO ₂ Ph
4357	2-benzimidazolyl- aminomethyl	1	COCH ₂ (3-indoly1)	н	NHSO ₂ Ph
4358	2-benzimidazolyl- aminomethyl	1	SO2-	Н	NHSO2Ph
4359	2-benzimidazolyl- aminomethyl	1	CO ₂ -n-Bu	н	NHSO ₂ Ph
4360	2-benzimidazolyl- aminomethyl	1	CO ₂ -i-Bu	н	NHSO ₂ Ph
4361	2-benzimidazolyl- aminomethyl	1	CO ₂ -t-Bu	н	NHSO ₂ Ph
4362	2-benzimidazolyl- aminomethyl	1	Н	Н	NHSO2Ph
4363	2-benzimidazolyl- aminomethyl	1	-(CH ₂) ₄ NH ₂	н	NHSO ₂ Ph
4364	2-benzimidazolyl- aminomethyl	1	COPh	н	NHSO ₂ Ph
4365	2-benzimidazolyl- aminomethyl	1	cyclopropy	н	NHSO ₂ Ph
4366	2-benzimidazolyl- aminomethyl	1	SO ₂ -n-Bu	Н	NHSO ₂ Ph
4367	2-benzimidazolyl-	1	Cbz	H .	NHSO ₂ -(2,4,6-trimethylphenyl)
4368	aminomethyl 2-benzimidazolyl-	1	SO ₂ Ph	Н	NHSO2-(2,4,6-
4369	aminomethyl 2-benzimidazolyl- aminomethyl	1	CO(CH ₂) ₂ Ph	н	trimethylphenyl) NHSO2-(2,4,6- trimethylphenyl)

4370	2-benzimidazolyl-	1	Bn	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4371	2-benzimidazolyl-	1	n-Bu	H	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4372	2-benzimidazolyl-	1	CO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4373	2-benzimidazolyl-	1	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4374	2-benzimidazolyl-	1	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4375	2-benzimidazolyl-	1	н	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4376	2-benzimidazoly1-	1	-(CH ₂)4NH ₂	н -	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4377	2-benzimidazolyl-	1	COPh	H	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4378	2-benzimidazolyl-	1	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
4379	2-benzimidazolyl-	1	Cbz	н	NHCbz
	aminomethyl				
4380	2-benzimidazolyl-	1	SO ₂ Ph	н	NHCbz
	aminomethyl				
4381	2-benzimidazolyl-	1	$CO(CH_2)_2Ph$	Н	NHCbz
	aminomethyl				
4382	2-benzimidazolyl-	1	Bn	Н	NHCbz
	aminomethyl				
4383	2-benzimidazolyl-	1	n-Bu	Н	NHCbz
	aminomethyl			•	
4384	2-benzimidazolyl-	1	CO ₂ -n-Bu	Н	NHCbz
	aminomethyl				
4385	2-benzimidazolyl-	1	CO ₂ -i-Bu	н	NHCbz
	aminomethyl				
4386	2-benzimidazolyl-	1	CO ₂ -t-Bu	н	NHCbz
	aminomethyl				

4387	2-benzimidazolyl-	1	н	н	NHCbz
	aminomethyl				
4388	2-benzimidazoly1-	1	-(CH2)4NH2	Н	NHCbz
	aminomethyl				
4389	2-benzimidazoly1-	1	COPh	Н	NHCbz
	aminomethyl				
4390	2-benzimidazolyl-	1	SO ₂ -n-Bu	Н	NHCbz
	aminomethyl				
4391	7-aza-2-	1	Cbz	н	NHSO ₂ Ph
	benzimidazolyl				
4392	7-aza-2-	1	SO ₂ Ph	н	NHSO2Ph
	benzimidazolyl				
4393	7-aza-2-	1	CO(CH ₂) ₂ Ph	Н -	NHSO2Ph
	benzimidazolyl				
4394	7-aza-2-	1	Bn	н	NHSO2Ph
	benzimidazolyl				
4395	7-aza-2-	1	n-Bu	н	NHSO ₂ Ph
	benzimidazolyl				
4396	7-aza-2-	1	COCH ₂ (3-	Н	NHSO2Ph
	benzimidazolyl		indolyl)		
4397	7-aza-2-	1	SO2-	н	NHSO2Ph
	benzimidazolyl		(biphenyl)		
4398	7-aza-2-	1	CO ₂ -n-Bu	н	NHSO2Ph
	benzimidazolyl				
4399	7-aza-2-	1	CO ₂ -i-Bu	Н	NHSO2Ph
	benzimidazolyl				
4400	7-aza-2-	1	CO ₂ -t-Bu	н	NHSO ₂ Ph
	benzimidazolyl				
4401	7-aza-2-	1	н	н	NHSO ₂ Ph
	benzimidazolyl				
4402	7-aza-2-	1.	-(CH ₂) ₄ NH ₂	Н	NHSO ₂ Ph
	benzimidazolyl		-		_
4403	7-aza-2-	1	COPh	н	NHSO ₂ Ph
	benzimidazolyl				_
	-				

4404	7-aza-2-	1	cyclopropy	. н	NHSO ₂ Ph
	benzimidazolyl		l-methyl		
4405	7-aza-2-	1	so ₂ -n-Bu	н	NHSO ₂ Ph
	benzimidazolyl				
4406	7-aza-2-	1	Cbz	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4407	7-aza-2-	1	SO ₂ Ph	Н	NHSO2-(2,4,6-
	benzimidazolyl			•	trimethylphenyl)
4408	7-aza-2-	1	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4409	7-aza-2-	1	Bn	Н	NHSO2-(2,4,6-
~	benzimidazolyl				trimethylphenyl)
4410	7-aza-2-	1	n-Bu	н.	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4411	7-aza-2-	1	CO2-n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4412	7-aza-2-	1	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4413	7-aza-2-	1	CO ₂ -t-Bu	H	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4414	7-aza-2-	1	н	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4415	7-aza-2-	1	$-(CH_2)_4NH_2$	H	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4416	7-aza-2-	1	COPh	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4417	7-aza-2-	1	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
4418	7-aza-2-	1	Cbz	н	NHCbz
	benzimidazolyl				
4419	7-aza-2-	1	SO ₂ Ph	Н	NHCbz
	benzimidazolyl				
4420	7-aza-2-	1	CO(CH ₂) ₂ Ph	н	NHCbz
	benzimidazolyl				

4421	7-aza-2-	1	Bn	H	NHCbz
	benzimidazolyl				
4422	7-aza-2-	1	n-Bu	H	NHCbz
	benzimidazolyl				
4423	7-aza-2-	1	CO ₂ -n-Bu	Н	NHCbz
	benzimidazolyl				
4424	7-aza-2-	1	CO ₂ -i-Bu	Н	NHCbz
	benzimidazolyl				
4425	7-aza-2-	1	CO ₂ -t-Bu	Н	NHCbz
	benzimidazolyl				
4426	7-aza-2-	1	н	Н	NHCbz
	benzimidazolyl				
4427	7-aza-2-	1	-(CH ₂)4NH ₂	н	NHCbz
	benzimidazolyl				
4428	7-aza-2-	1	COPh	н	NHCbz
	benzimidazolyl				
4429	7-aza-2-	1	so ₂ -n-Bu	Н	NHCbz
	benzimidazolyl				
4430	tetrahydropyrimidin	1	Cbz	Н	NHSO2Ph
	-2-ylaminomethyl				
4431	tetrahydropyrimidin	1	SO ₂ Ph	н	NHSO ₂ Ph
	-2-ylaminomethyl				
4432	tetrahydropyrimidin	1	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
	-2-ylaminomethyl				
4433	tetrahydropyrimidin	1	Bn	н	NHSO ₂ Ph
	-2-ylaminomethyl				
4434	tetrahydropyrimidin	1	n-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
4435	tetrahydropyrimidin	1	COCH ₂ (3-	Н	NHSO ₂ Ph
	-2-ylaminomethyl		indolyl)		
4436	tetrahydropyrimidin	1	SO2-	н	NHSO2Ph
	-2-ylaminomethyl		(biphenyl)		
4437	tetrahydropyrimidin	1	CO2-n-Bu	н	NHSO ₂ Ph
	-2-ylaminomethyl				

4438	tetrahydropyrimidin	1	CO ₂ -i-Bu	н	NHSO ₂ Ph
	-2-ylaminomethyl			-	
4439		1	CO ₂ -t-Bu	н	NHSO ₂ Ph
	-2-ylaminomethyl				
4440	tetrahydropyrimidin	1	Н	н	NHSO2Ph
	-2-ylaminomethyl				
4441	tetrahydropyrimidin	1	-(CH ₂) ₄ NH ₂	н	NHSO ₂ Ph
	-2-ylaminomethyl				
4442	tetrahydropyrimidin	1	COPh	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
4443	tetrahydropyrimidin	1	cyclopropy	н	NHSO ₂ Ph
	-2-ylaminomethyl		1-methyl		
4444	tetrahydropyrimidin	1	SO ₂ -n-Bu	н .	NHSO ₂ Ph
	-2-ylaminomethyl				
4445	tetrahydropyrimidin	1	Cbz	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4446	tetrahydropyrimidin	1	SO ₂ Ph	H	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4447	tetrahydropyrimidin	1	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-
**	-2-ylaminomethyl				trimethylphenyl)
4448	tetrahydropyrimidin	1	Bn	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4449	tetrahydropyrimidin	1	n-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4450	tetrahydropyrimidin	1	CO2-n-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4451	tetrahydropyrimidin	1	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4452	tetrahydropyrimidin	1	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4453	tetrahydropyrimidin	1	Н	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4454	tetrahydropyrimidin	1	-(CH2)4NH2	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)

4455	tetrahydropyrimidin	1	COPh	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4456	tetrahydropyrimidin	1	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
4457	tetrahydropyrimidin	1	Cbz	Н	NHCbz
	-2-ylaminomethyl				
4458	tetrahydropyrimidin	1	SO ₂ Ph	н	NHCbz
	-2-ylaminomethyl				
4459	tetrahydropyrimidin	1	CO(CH ₂) ₂ Ph	Н	NHCbz
	-2-ylaminomethyl				
4460	tetrahydropyrimidin	1	Bn	н	NHCbz
	-2-ylaminomethyl				
4461	tetrahydropyrimidin	1	n-Bu	н	NHCbz
	-2-ylaminomethyl				
4462	tetrahydropyrimidin	1	CO2-n-Bu	Н	NHCbz
	-2-ylaminomethyl				
4463	tetrahydropyrimidin	1	CO ₂ -i-Bu	Н	NHCbz
	-2-ylaminomethyl				
4464	tetrahydropyrimidin	1	CO ₂ -t-Bu	H	NHCbz
	-2-ylaminomethyl		•		
4465	tetrahydropyrimidin	1	н	Н	NHCbz
	-2-ylaminomethyl				
4466	tetrahydropyrimidin	1	(CH ₂) ₄ NH ₂	Н	NHCbz
	-2-ylaminomethyl				
4467	tetrahydropyrimidin	1	COPh	Н	NHCbz
	-2-ylaminomethyl				

Table 5

Ex.	R ¹	r	R ^{10a}	R14	R ¹⁵
No.					
500 1	2-pyridinylamino- methyl	0	Cbz	н	NHSO ₂ Ph
5002	2-pyridinylamino- methyl	0	SO ₂ Ph	н	NHSO ₂ Ph
5003	2-pyridinylamino- methyl	0	CO(CH ₂) ₂ Ph	н	NHSO2Ph
5004	2-pyridinylamino- methyl	0	Bn	н	NHSO2Ph
5005	2-pyridinylamino- methyl	0	n-Bu	н	NHSO2Ph
5006	2-pyridinylamino- methyl	0	COCH ₂ (3-indoly1)	н	NHSO ₂ Ph
5007	2-pyridinylamino-	0	S02-(bi	н	NHSO ₂ Ph
5008	methyl 2-pyridinylamino- methyl	0	phenyl) CO ₂ -n-Bu	н	NHSO ₂ Ph
5009	2-pyridinylamino- methyl	0	CO ₂ -i-Bu	Н	NHSO2Ph
5010	2-pyridinylamino- methyl	0	CO ₂ -t-Bu	Н	NHSO2Ph
5011	2-pyridinylamino- methyl	0	-(CH2)4NH2	Н	NHSO2Ph
5012	2-pyridinylamino- methyl	0	COPh	н	NHSO2Ph

5013	2-pyridinylamino-	.0	cyclo	н	NHSO ₂ Ph
	methyl		propyl-		
			methyl		
5014	2-pyridinylamino-	0	SO ₂ -n-Bu	Н	NHSO ₂ Ph
	methyl			•	
5015	2-pyridinylamino-	0	Cbz	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5016	2-pyridinylamino-	0	so ₂ Ph	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5017	2-pyridinylamino-	0	$CO(CH_2)_2Ph$	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5018	2-pyridinylamino-	0	Bn	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5019	2-pyridinylamino-	0	n-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5020	2-pyridinylamino-	0	CO2-n-Bu	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5021	2-pyridinylamino-	0	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5022	2-pyridinylamino-	0	CO2-t-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5023	2-pyridinylamino-	0	-(CH2)4NH2	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5024	2-pyridinylamino-	0	COPh	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5025	2-pyridinylamino-	0	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5026	2-pyridinylamino-	0	Cbz	н	NHCbz
	methyl				
5027	2-pyridinylamino-	0	SO ₂ Ph	н	NHCbz
	methyl				
5028	2-pyridinylamino-	0	CO(CH ₂) ₂ Ph	н	NHCbz
	methyl				
5029	2-pyridinylamino-	0	Bn	н	NHCbz
	methy1				

5030	2-pyridinylamino- methyl	0	n-Bu	H	NHCbz
5031	2-pyridinylamino- methyl	0	CO ₂ -n-Bu	н	NHCbz
5032	2-pyridinylamino- methyl	0	CO ₂ -i-Bu	Н	NHCbz
5033	2-pyridinylamino- methyl	0	CO ₂ -t~Bu	н	NHCbz
5034	2-pyridinylamino- methyl	0	-(CH ₂) ₄ NH ₂	н	NHCbz
5035	2-pyridinylamino- methyl		COPh	н	NHCbz
5036	2-pyridinylamino- methyl	0	SO ₂ -n-Bu	н	NHCbz
5037	2-imidazolylamino- methyl	0	Cbz	Н	NHSO ₂ Ph
5038	2-imidazolylamino- methyl	0	SO ₂ Ph	Н	NHSO ₂ Ph
5039	2-imidazolylamino- methyl	0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
5040	2-imidazolylamino- methyl	0	Bn	н	NHSO ₂ Ph
5041	2-imidazolylamino- methyl	0	n-Bu	н	NHSO2Ph
5042	2-imidazolylamino- methyl	0	COCH ₂ (3-indoly1)	н	NHSO ₂ Ph
5043	2-imidazolylamino- methyl	0	SO2-(bi phenyl)	Н	NHSO ₂ Ph
5044	2-imidazolylamino- methyl	0	CO ₂ -n-Bu	н	NHSO ₂ Ph
5045	2-imidazolylamino- methyl	0	CO ₂ -i-Bu	Н	NHSO ₂ Ph
5046	2-imidazolylamino- methyl	0	CO ₂ -t-Bu	н	NHSO ₂ Ph

5047	2-imidazolylamino- methyl	0	-(CH ₂) ₄ NH ₂	Н	NHSO ₂ Ph
5048	2-imidazolylamino-	0	COPh	Н	NHSO ₂ Ph
5049	methyl 2-imidazolylamino-	0	cyclo	н	NHSO ₂ Ph
	methyl		propyl-		
			methyl		
5050	2-imidazolylamino-	0	SO ₂ -n-Bu	Н	NHSO ₂ Ph
	methyl				
5051	2-imidazolylamino-	0	Cbz	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5052	2-imidazolylamino-	.0	SO ₂ Ph	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5053	2-imidazolylamino-	0	$CO(CH_2)_2Ph$	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5054	2-imidazolylamino-	0	Bn	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5055	2-imidazolylamino-	0	n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5056	2-imidazolylamino-	0	CO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5057	2-imidazolylamino-	0	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5058	2-imidazolylamino-	0	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5059	2-imidazolylamino-	0	-(CH ₂) ₄ NH ₂	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5060	2-imidazolylamino-	0	COPh	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5061	2-imidazolylamino-	0	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
3001	methyl	•	_		trimethylphenyl)
E063	2-imidazolylamino-	0	Cbz	н	NHCbz
5062		J		••	
e	methyl	0	SO ₂ Ph	н	NHCbz
5063	2-imidazolylamino-	U	502111	п	1111000
	methyl				

5064	2-imidazolylamino- methyl	0	CO(CH ₂) ₂ Ph	н	NHCbz
5065	2-imidazolylamino- methyl	0	Bn	н	NHCbz
5066	2-imidazolylamino- methyl	0	n-Bu	Н	NHCbz
5067	2-imidazolylamino- methyl	0	CO ₂ -n-Bu	Н	NHCbz
5068	2-imidazolylamino- methyl	0	CO ₂ -i-Bu	н	NHCbz
5069	2-imidazolylamino- methyl		CO ₂ -t-Bu	н	NHCbz
5070	2-imidazolylamino- methyl	0	-(CH ₂) ₄ NH ₂	H	NHCbz
5071	2-imidazolylamino- methyl	0	COPh	Н	NHCbz
5072	2-imidazolylamino- methyl	0	SO ₂ -n-Bu	н	NHCbz
5073	2-imidazolinyl- aminomethyl	0	Cbz	Н	NHSO ₂ Ph
5074	2-imidazolinyl- aminomethyl	0	SO ₂ Ph	Н	NHSO2Ph
5075	2-imidazolinyl- aminomethyl	0	CO(CH ₂) ₂ Ph	Н	NHSO2Ph
5076	2-imidazolinyl- aminomethyl	0	Bn	H	NHSO2Ph
5077	2-imidazolinyl- aminomethyl	0	n-Bu	н	NHSO2Ph
5078	2-imidazolinyl- aminomethyl	0	COCH ₂ (3-indolyl)	Н	NHSO ₂ Ph
5079	2-imidazolinyl- aminomethyl	0	SO2-(bi phenyl)	н	NHSO2Ph
5080	2-imidazolinyl- aminomethyl	0	CO ₂ -n-Bu	н	NHSO ₂ Ph

5081	2-imidazolinyl- aminomethyl	0	CO ₂ -i-Bu	Н	NHSO ₂ Ph
5082	2-imidazolinyl-	0	CO ₂ -t-Bu	Н	NHSO2Ph
5083	aminomethyl 2-imidazolinyl-	•	-/CU-).NU-	••	MICO. PL
2083	aminomethyl	0	-(CH ₂) ₄ NH ₂	н	NHSO ₂ Ph
5084	2-imidazolinyl-	0	COPh	н	NHSO ₂ Ph
	aminomethyl				
5085	2-imidazolinyl-	0	cyclo	Н	NHSO ₂ Ph
	aminomethyl		propyl-		
			methyl		
5086	2-imidazolinyl-	0	SO ₂ -n-Bu	Н	NHSO ₂ Ph
	aminomethyl				
5087	2-imidazolinyl-	0	Cbz	H	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5088	2-imidazolinyl-	0	SO ₂ Ph	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5089	2-imidazolinyl-	0	$CO(CH_2)_2Ph$	H	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5090	2-imidazolinyl-	0	Bn	H	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
5091	2-imidazolinyl-	0	n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5092	2-imidazolinyl-	0	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5093	2-imidazolinyl-	0	CO ₂ -i-Bu	H	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
5094	2-imidazolinyl-	0	CO2-t-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5095	2-imidazolinyl-	0	-(CH2)4NH2	н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
5096	2-imidazolinyl-	0	COPh	H	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
5097	2-imidazolinyl-	0	SO ₂ -n-Bu	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)

5098	2-imidazolinyl- aminomethyl	.0	Cbz	Н	NHCbz
5099	2-imidazolinyl- aminomethyl	0	so ₂ Ph	н	NHCbz
5100	2-imidazolinyl- aminomethyl	0	CO(CH ₂) ₂ Ph	н	NHCbz
5101	2-imidazolinyl- aminomethyl	0	Bn	н	NHCbz
5102	2-imidazolinyl- aminomethyl	0	n-Bu	н	NHCbz
5103	2-imidazoliny1- aminomethyl	0	CO ₂ -n-Bu	н	NHCbz
5104	2-imidazolinyl- aminomethyl	0	CO ₂ -i-Bu	н.	NHCbz
5105	2-imidazolinyl- aminomethyl	0	CO ₂ -t-Bu	н	NHCbz
5106	2-imidazolinyl- aminomethyl	0	-(CH ₂) ₄ NH ₂	н	NHCbz
5107	2-imidazolinyl- aminomethyl	0	COPh	Н	· NHCbz
5108	2-imidazolinyl- aminomethyl	0	SO ₂ -n-Bu	н	NHCbz
5109	2-benzimidazolyl- aminomethyl	0	Cbz	н	NHSO ₂ Ph
5110	2-benzimidazolyl- aminomethyl	0	SO ₂ Ph	н	NHSO ₂ Ph
5111	2-benzimidazolyl- aminomethyl	0	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
5112	2-benzimidazolyl- aminomethyl	0	Bn	н	NHSO ₂ Ph
5113	2-benzimidazolyl- aminomethyl	0	n-Bu	H	NHSO2Ph
5114	2-benzimidazolyl-	0	COCH ₂ (3-	н	NHSO ₂ Ph
	aminomethyl		indoly1)		•

5115	2-benzimidazolyl-	0	SO2-(bi	H	NHSO2Ph
	aminomethyl		phenyl)		
5116	2-benzimidazolyl-	0	CO ₂ -n-Bu	Н	NHSO ₂ Ph
	aminomethyl				
5117	2-benzimidazolyl-	0	CO ₂ -i-Bu	H	NHSO ₂ Ph
	aminomethyl				
5118	2-benzimidazolyl-	0	CO ₂ -t-Bu	Н	NHSO ₂ Ph
	aminomethyl				
5119	2-benzimidazolyl-	0	-(CH ₂) ₄ NH ₂	н	NHSO ₂ Ph
	aminomethyl				
5120	2-benzimidazolyl-	0	COPh	Н	NHSO ₂ Ph
	aminomethyl	•			
5121	2-benzimidazoly1-	0	cyclo	H.	NHSO ₂ Ph
	aminomethyl		propyl-		
			methyl		
5122	2-benzimidazolyl-	0	SO ₂ -n-Bu	Н	NHSO2Ph
	aminomethyl				
5123	2-benzimidazolyl-	0	Cbz	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
5124	2-benzimidazolyl-	0	SO ₂ Ph	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5125	2-benzimidazolyl-	0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
5126	2-benzimidazolyl-	0	Bn	Н	$NHSO_2 - (2,4,6-$
	aminomethyl				trimethylphenyl)
5127	2-benzimidazolyl-	0	n-Bu	Н	$NHSO_2 - (2, 4, 6 -$
	aminomethyl				trimethylphenyl)
5128	2-benzimidazolyl-	0	CO ₂ -n-Bu	. н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
5129	2-benzimidazolyl-	0	CO ₂ -i-Bu	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
5130	2-benzimidazolyl-	0	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5131	2-benzimidazoly1-	0	-(CH ₂) ₄ NH ₂	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)

5132	2-benzimidazolyl-	0	COPh	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5133	2-benzimidazolyl-	0	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5134	2-benzimidazolyl-	0	Cbz	• н	NHCbz
	aminomethyl				
5135	2-benzimidazolyl-	0	SO ₂ Ph	H	NHCbz
	aminomethyl		•		1
5136	2-benzimidazolyl-	0	CO(CH ₂) ₂ Ph	Н	NHCbz
	aminomethyl				
5137	2-benzimidazolyl-	0	Bn	Н	NHCbz
	aminomethyl				
5138	2-benzimidazoly1-	0	n-Bu	н	NHCbz
	aminomethyl				
5139	2-benzimidazolyl-	0	CO ₂ -n-Bu	Н	NHCbz
	aminomethyl				
5140	2-benzimidazolyl-	0	CO ₂ -i-Bu	Н	NHCbz
	aminomethyl				
5141	2-benzimidazolyl-	0	CO ₂ -t-Bu	H	NHCbz
	aminomethyl				
5142	2-benzimidazolyl-	0	-(CH2)4NH2	H	NHCbz
	aminomethyl				
5143	2-benzimidazolyl-	0	COPh	Н	NHCbz
	aminomethyl				
5144	2-benzimidazolyl-	0	SO ₂ -n-Bu	Н	NHCbz
	aminomethyl				
5145	7-aza-2-	0	Cbz	н	NHSO ₂ Ph
	benzimidazolyl				
5146	7-aza-2-	0	SO ₂ Ph	Н	NHSO ₂ Ph
	benzimidazolyl				
5147	7-aza-2-	0	$CO(CH_2)_2Ph$	H	NHSO ₂ Ph
	benzimidazolyl				
5148	7-aza-2-	0	Bn	Н	NHSO ₂ Ph
	benzimidazolyl				

5149	7-aza-2-	0	n-Bu	Н	NHSO2Ph
	benzimidazolyl				
5150	7-aza-2-	0	COCH ₂ (3-	н	NHSO ₂ Ph
	benzimidazolyl		indolyl)		
5151	7-aza-2-	0	S02-(bi	н	NHSO ₂ Ph
	benzimidazolyl		phenyl)		
5152	7-aza-2-	0	CO ₂ -n-Bu	н	NHSO2Ph
	benzimidazolyl				
5153	7-aza-2-	0	CO ₂ -i-Bu	н	NHSO2Ph
	benzimidazolyl				
5154	7-aza-2-	0	CO ₂ -t-Bu	н	NHSO2Ph
	benzimidazolyl				
5155	7-aza-2-	0	-(CH2)4NH2	н :	NHSO2Ph
	benzimidazolyl				
5156	7-aza-2-	0	COPh	н	NHSO2Ph
	benzimidazolyl				
5157	7-aza-2-	0	cyclo	н	NHSO ₂ Ph
	benzimidazolyl		propyl-		
			methyl		•
5158	7-aza-2-	0	so ₂ -n-Bu	Н	NHSO ₂ Ph
	benzimidazolyl				
5159	7-aza-2-	0	Cbz	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5160	7-aza-2-	0	SO ₂ Ph	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5161	7-aza-2-	0	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5162	7-aza-2-	0	Bn	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5163	7-aza-2-	0	n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5164	7-aza-2-	0	CO2-n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5165	7-aza-2-	0	CO2-i-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)

5166	7-aza-2-	0	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5167	7-aza-2-	0	-(CH ₂) ₄ NH ₂	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5168	7-aza-2-	0	COPh	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5169	7-aza-2-	0	so ₂ -n-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5170	7-aza-2-	0	Cbz	н	NHCbz
	benzimidazolyl				
5171	7-aza-2-	0	SO ₂ Ph	н	NHCbz
	benzimidazolyl				
5172	7-aza-2-	0	CO(CH ₂) ₂ Ph	н	NHCbz
	benzimidazolyl				
5173	7-aza-2-	0	Bn	H	NHCbz
	benzimidazolyl				
5174	7-aza-2-	0	n-Bu	Н	NHCbz
	benzimidazolyl				
5175	7-aza-2-	0	CO ₂ -n-Bu	Н	NHCb2
	benzimidazolyl				
5176	7-aza-2-	0	CO ₂ -i-Bu	Н	NHCbz
	benzimidazolyl				
5177	7-aza-2-	0	CO ₂ -t-Bu	н	NHCbz
	benzimidazolyl				
5178	7-aza-2-	0	-(CH2)4NH2	Н	NHCbz
	benzimidazolyl				
5179	7-aza-2-	0	COPh	Н	NHCbz
	benzimidazolyl				
5180	7-aza-2-	. 0	SO ₂ -n-Bu	H	NHCbz
	benzimidazolyl				
5181	tetrahydropyrimidin	0	Cbz	H	NHSO ₂ Ph
	-2-ylaminomethyl				
5182	tetrahydropyrimidin	0	SO ₂ Ph	Н	NHSO ₂ Ph
	-2-ylaminomethyl				

5183	tetrahydropyrimidin	. 0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5184	tetrahydropyrimidin	0	Bn	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5185	tetrahydropyrimidin	0	n-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5186	tetrahydropyrimidin	0	COCH ₂ (3-	H	NHSO ₂ Ph
	-2-ylaminomethyl		indolyl)		•
5187	tetrahydropyrimidin	0	S02-(bi	Н	NHSO ₂ Ph
	-2-ylaminomethyl		phenyl)		
5188	tetrahydropyrimidin	0	CO2-n-Bu	H	NHSO2Ph
	-2-ylaminomethyl				
5189	tetrahydropyrimidin	0	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5190	tetrahydropyrimidin	0	CO ₂ -t-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5191	tetrahydropyrimidin	0	-(CH2)4NH2	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5192	tetrahydropyrimidin	0	COPh	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5193	tetrahydropyrimidin	0	cyclo	н	NHSO ₂ Ph
	-2-ylaminomethyl		propyl-		
			methyl		
5194	tetrahydropyrimidin	0	so ₂ -n-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5195	tetrahydropyrimidin	0	Cbz	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5196	tetrahydropyrimidin	0	SO ₂ Ph	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5197	tetrahydropyrimidin	0	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5198	tetrahydropyrimidin	C) Bn	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5199		. (n-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
	-				

5200	tetrahydropyrimidin	0	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5201	tetrahydropyrimidin	0	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5202	tetrahydropyrimidin	0	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5203	tetrahydropyrimidin	0	-(CH2)4NH2	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5204	tetrahydropyrimidin	0	COPh	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5205	tetrahydropyrimidin	0	so ₂ -n-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5206	tetrahydropyrimidin	0	Cbz	Η.	NHCbz
	-2-ylaminomethyl				
5207	tetrahydropyrimidin	0	SO ₂ Ph	· H	NHCbz
·	-2-ylaminomethyl				
5208	tetrahydropyrimidin	0	CO(CH ₂) ₂ Ph	H	NHCbz
	-2-ylaminomethyl				
5209	tetrahydropyrimidin	0	Bn	H	NHCbz
	-2-ylaminomethyl				
5210	tetrahydropyrimidin	0	n-Bu	Н	NHCbz
	-2-ylaminomethyl				
5211	tetrahydropyrimidin	0	CO2-n-Bu	н	NHCbz
	-2-ylaminomethyl				
5212	tetrahydropyrimidin	0	CO ₂ -i-Bu	H	NHCbz
	-2-ylaminomethyl				
5213	tetrahydropyrimidin	0	CO ₂ -t-Bu	н	NHCbz
	-2-ylaminomethyl				
5214	tetrahydropyrimidin	0	-(CH2)4NH2	н	NHCbz
	-2-ylaminomethyl				
5215	tetrahydropyrimidin	0	COPh	н	NHCbz
	-2-ylaminomethyl				
5216	tetrahydropyrimidin	0	SO ₂ -n-Bu	Н	NHCbz
•	-2-ylaminomethyl				

5217	2-pyridinylamino- methyl	1	Cbz	Н	NHSO ₂ Ph
5218	2-pyridinylamino- methyl	1	SO ₂ Ph	н	NHSO2Ph
5219	2-pyridinylamino- methyl	1	CO(CH ₂) ₂ Ph	н	NHSO2Ph
5220	2-pyridinylamino- methyl	1	Bn	н	NHSO2Ph
5221	2-pyridinylamino- methyl	1	n-Bu	н	NHSO ₂ Ph
5222	2-pyridinylamino- methyl		COCH ₂ (3-indolyl)	Н	NHSO ₂ Ph
5223	2-pyridinylamino- methyl	1	SO2-(bi phenyl)	H	NHSO ₂ Ph
5224	2-pyridinylamino- methyl	1	CO ₂ -n-Bu	н	NHSO ₂ Ph
5225	2-pyridinylamino- methyl	1	CO ₂ -i-Bu	н	NHSO ₂ Ph
5226	2-pyridinylamino- methyl	1	CO ₂ -t-Bu	Н	NHSO2Ph
5227	2-pyridinylamino- methyl	1	-(CH ₂) ₄ NH ₂	н	NHSO2Ph
5228	2-pyridinylamino- methyl	1	COPh	Н	NHSO ₂ Ph
5229	2-pyridinylamino- methyl	1	cyclo propyl- methyl	Н	NHSO2Ph
5230	2-pyridinylamino- methyl	1	so ₂ -n-Bu	Н	NHSO ₂ Ph
5231	2-pyridinylamino- methyl	1	Cbz	Н	NHSO ₂ -(2,4,6- trimethylphenyl)
5232	2-pyridinylamino- methyl	1	SO ₂ Ph	Н	NHSO ₂ -(2,4,6- trimethylphenyl)
5233	2-pyridinylamino- methyl	1	CO(CH ₂) ₂ Ph	H	NHSO ₂ -(2,4,6- trimethylphenyl)

5234	2-pyridinylamino-	1	Bn	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5235	2-pyridinylamino-	1	n-Bu	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5236	2-pyridinylamino-	1	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5237	2-pyridinylamino-	1	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5238	2-pyridinylamino-	1	CO ₂ -t-Bu	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5239	2-pyridinylamino-	1	$-(CH_2)_4NH_2$	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5240	2-pyridinylamino-	1	COPh	H.	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5241	2-pyridinylamino-	1	SO2-n-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5242	2-pyridinylamino-	1	Cbz	н	NHCbz
	methyl				
5243	2-pyridinylamino-	1	SO ₂ Ph	Н	NHCbz
	methyl				
5244	2-pyridinylamino-	1	$CO(CH_2)_2Ph$	Н	NHCbz
	methyl				
5245	2-pyridinylamino-	1	Bn	Н	NHCbz
	methyl				
5246	2-pyridinylamino-	1	n-Bu	Н	NHCbz
	methyl				
5247	2-pyridinylamino-	1	CO2-n-Bu	н	NHCbz
	methyl				
5248	2-pyridinylamino-	1	CO ₂ -i-Bu	Н	NHCbz
	methyl				
5249	2-pyridinylamino-	1	CO ₂ -t-Bu	Н	NHCbz
	methyl.				
5250	2-pyridinylamino-	1	-(CH ₂) ₄ NH ₂	н	NHCbz
	methyl				

5251	2-pyridinylamino-	1	COPh	Н	NHCbz
5252	methyl 2-pyridinylamino-	1	SO ₂ -n-Bu	н	NHCbz
5253	methyl 2-imidazolylamino- methyl	1	Cbz	н	NHSO ₂ Ph
5254	2-imidazolylamino- methyl	1	SO ₂ Ph	н	NHSO ₂ Ph
5255	2-imidazolylamino- methyl	1	CO(CH ₂) ₂ Ph	н	NHSO2Ph
5256	2-imidazolylamino- methyl	1	Bn	н	NHSO ₂ Ph
5257	2-imidazolylamino- methyl	1	n-Bu	н.	NHSO ₂ Ph
5258	2-imidazolylamino- methyl	1	COCH ₂ (3-	н	NHSO ₂ Ph
5259	2-imidazolylamino- methyl	1	SO2-(bi	Н	NHSO ₂ Ph
5260	2-imidazolylamino- methyl	1	CO2-n-Bu	н	NHSO ₂ Ph
5261	2-imidazolylamino- methyl	1	CO ₂ -i-Bu	н	NHSO2Ph
5262	2-imidazolylamino- methyl	1	CO ₂ -t-Bu	н	NHSO2Ph
5263	2-imidazolylamino- methyl	1	- (CH ₂) ₄ NH ₂	н	NHSO ₂ Ph
5264	2-imidazolylamino- methyl	1	COPh	н	NHSO2Ph
5265	2-imidazolylamino- methyl	1	cyclo propyl-	н	NHSO2Ph
			methyl		
5266	2-imidazolylamino- methyl	1	so ₂ -n-Bu	н	NHSO ₂ Ph
5267	2-imidazolylamino-	1	Cbz	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)

5268	2-imidazolylamino-	1	SO ₂ Ph	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5269	2-imidazolylamino-	1	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5270	2-imidazolylamino-	1	Bn	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5271	2-imidazolylamino-	1	n-Bu	н	NHSO2-(2,4,6-
	methyl		•		trimethylphenyl)
5272	2-imidazolylamino-	1	CO2-n-Bu	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5273	2-imidazolylamino-	1	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5274	2-imidazolylamino-	1	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5275	2-imidazolylamino-	1	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
5276	2-imidazolylamino-	1	COPh	Н	NHSO2-(2,4,6-
	methy1				trimethylphenyl)
5277	2-imidazolylamino-	1	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
•	methyl				trimethylphenyl)
5278	2-imidazolylamino-	1	Cbz	н	NHCbz
	methyl				
5279	2-imidazolylamino-	1	SO ₂ Ph	H	NHCbz
	methyl				
5280	2-imidazolylamino-	1	CO(CH ₂) ₂ Ph	H	NHCbz
	methyl				
5281	2-imidazolylamino-	1	Bn	н	NHCbz
	methyl				
5282	2-imidazolylamino-	1	n-Bu	Н	NHCbz
	methyl				
5283	2-imidazolylamino-	1	CO ₂ -n-Bu	н	NHCbz
	methyl				
5284	2-imidazolylamino-	1	CO ₂ -i-Bu	н	NHCbz
	methyl				

5285	2-imidazolylamino- methyl	1	CO ₂ -t-Bu	Н	NHCbz
5286	2-imidazolylamino- methyl	1	-(CH ₂) ₄ NH ₂	Н	NHCbz
5287	2-imidazolylamino- methyl	1	COPh	Н	NHCbz
5288	2-imidazolylamino- methyl	1	SO ₂ -n-Bu	н	NHCbz
5289	2-imidazolinyl- aminomethyl	1	Cbz	н	NHSO2Ph
5290	2-imidazolinyl- aminomethyl	1	so ₂ Ph	н	NHSO2Ph
5291	2-imidazolinyl- aminomethyl	1	CO(CH ₂) ₂ Ph	H .	NHSO2Ph
5292	2-imidazolinyl- aminomethyl	1	[*] Bn	Н	NHSO2Ph
5293	2-imidazolinyl- aminomethyl	1	n-Bu	Н	NHSO2Ph
5294	2-imidazolinyl- aminomethyl	1	COCH ₂ (3-indolyl)	H	NHSO2Ph
5295	2-imidazolinyl- aminomethyl	1	SO2-(bi phenyl)	Н	NHSO ₂ Ph
5296	2-imidazolinyl- aminomethyl	1	CO ₂ -n-Bu	н	NHSO ₂ Ph
5297	2-imidazolinyl- aminomethyl	1	CO ₂ -i-Bu	Н	NHSO ₂ Ph
5298	2-imidazolinyl- aminomethyl	1	CO ₂ -t-Bu	Н	NHSO ₂ Ph
5299	2-imidazolinyl- aminomethyl	1	-(CH ₂) ₄ NH ₂	Н	NHSO ₂ Ph
5300	2-imidazolinyl- aminomethyl	1	COPh	н	NHSO ₂ Ph
5301	2-imidazolinyl- aminomethyl	1	cyclo propyl-	н	NHSO2Ph
			methyl		

5302	2-imidazolinyl- aminomethyl	1	SO ₂ -n-Bu	н	NHSO ₂ Ph
5303	2-imidazolinyl-	1	Cbz	н	NHSO2-(2,4,6~
	aminomethyl				trimethylphenyl)
5304	2-imidazolinyl-	1	SO ₂ Ph	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5305	2-imidazolinyl-	1	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5306	2-imidazolinyl-	1	Bn	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5307	2-imidazolinyl-	1	n-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5308	2-imidazolinyl-	1	CO ₂ -n-Bu	H	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5309	2-imidazolinyl-	1	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5310	2-imidazoliny1-	1	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5311	2-imidazolinyl-	1	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5312	2-imidazolinyl-	1	COPh	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5313	2-imidazolinyl-	1	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5314	2-imidazolinyl-	1	Cbz	н	NHCbz
	aminomethyl				
5315	2-imidazolinyl-	1	SO ₂ Ph	Н	NHCbz
	aminomethyl				
5316	2-imidazolinyl-	1	CO(CH ₂) ₂ Ph	н	NHCbz
	aminomethyl				
5317	2-imidazolinyl-	1	Bn	н	NHCbz
	aminomethyl				
5318	2-imidazolinyl-	1	n-Bu	н	NHCbz
	aminomethyl				

5319	2-imidazolinyl- aminomethyl	1	CO ₂ -n-Bu	Н	NHCbz
5320	2-imidazolinyl-	1	CO ₂ -i-Bu	н	NHCbz
5321	aminomethyl 2-imidazolinyl-	1	CO ₂ -t-Bu	н	NHCbz
5322	aminomethyl 2-imidazolinyl-	1	-(CH ₂) ₄ NH ₂	н	NHCbz
5323	aminomethyl 2-imidazolinyl-	1	COPh	н	NHCbz
5324	aminomethyl 2-imidazolinyl-	1	SO ₂ -n-Bu	н	NHCbz
5325	aminomethyl 2-benzimidazolyl-	1	Cbz	н	NHSO ₂ Ph
5326	aminomethyl 2-benzimidazolyl-	1	SO ₂ Ph	н	NHSO ₂ Ph
5327	aminomethyl 2-benzimidazolyl-	1	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
5328	aminomethyl 2-benzimidazolyl-	1	Bn	н	NHSO2Ph
5329	aminomethyl 2-benzimidazolyl-	1	n-Bu	Н	NHSO ₂ Ph
5330	aminomethyl 2-benzimidazolyl-	1	COCH ₂ (3-	н	NHSO2Ph
5331	aminomethyl 2-benzimidazolyl-	1	indolyl) SO2-(bi	н .	NHSO ₂ Ph
5332	aminomethyl 2-benzimidazolyl-	1	phenyl) CO ₂ -n-Bu	н	NH5O2Ph
5333	aminomethyl 2-benzimidazolyl-	1	CO2-i-Bu	н	NHSO ₂ Ph
5334	aminomethyl 2-benzimidazolyl-	1	CO ₂ -t-Bu	н	NHSO ₂ Ph
5335	aminomethyl 2-benzimidazolyl-	1	-(CH ₂) ₄ NH ₂	н	NHSO ₂ Ph
	<u>ami</u> nomethyl				

5336	2-benzimidazolyl-	1	COPh	н	NHSO2Ph
	aminomethyl				
5337	2-benzimidazolyl-	1	cyclo	H	NHSO ₂ Ph
	aminomethyl		propyl-		
			methyl		
5338	2-benzimidazolyl-	1	SO ₂ -n-Bu	Н	NHSO ₂ Ph
	aminomethyl				
5339	2-benzimidazolyl-	1	Cbz	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5340	2-benzimidazolyl-	1	SO ₂ Ph	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5341	2-benzimidazolyl-	1	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5342	2-benzimidazolyl-	1	Bn	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5343	2-benzimidazolyl-	1	n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5344	2-benzimidazolyl-	1	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5345	2-benzimidazolyl-	1	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5346	2-benzimidazolyl-	1	CO2-t-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5347	2-benzimidazoly1-	1	-(CH ₂) ₄ NH ₂	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5348	2-benzimidazolyl-	1	COPh	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5349	2-benzimidazolyl-	1	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
5350	2-benzimidazolyl-	1	Cbz	н	NHCbz
	aminomethyl				
5351	2-benzimidazolyl-	1	SO ₂ Ph	н	NHCbz
	aminomethyl	-	-		
5352	2-benzimidazolyl-	1	CO(CH ₂) ₂ Ph	н	NHCbz
	aminomethyl	-	- 2 , 2		
	mmz				

5353	2-benzimidazolyl- aminomethyl	1	Bn	н	NHCbz
5354	2-benzimidazolyl-	1	n-Bu	н	NHCbz
	aminomethyl				
5355	2-benzimidazolyl-	1	CO ₂ -n-Bu	H	NHCbz
	aminomethyl				
5356	2-benzimidazolyl-	1	CO ₂ -i-Bu	H	NHCbz
	aminomethyl				
5357	2-benzimidazolyl-	1	CO ₂ -t-Bu	H	NHCbz
	aminomethyl				
5358	2-benzimidazolyl-	1	-(CH2)4NH2	H	NHCbz
	aminomethyl	•			
5359	2-benzimidazolyl-	1	COPh	H	NHCbz
	aminomethyl				
5360	2-benzimidazolyl-	1	SO ₂ -n-Bu	Н	NHCbz
	aminomethyl				
5361	7-aza-2-	1	Cbz	Н	NHSO ₂ Ph
	benzimidazolyl				
5362	7-aza-2-	1	SO ₂ Ph	Н	NHSO ₂ Ph
	benzimidazolyl				
5363	7-aza-2-	1	$CO(CH_2)_2Ph$	Н	NHSO ₂ Ph
	benzimidazolyl				
5364	7-aza-2-	1	Bn	Н	NHSO2Ph
	benzimidazolyl				
5365	7-aza-2-	1	n-Bu	H	NHSO ₂ Ph
	benzimidazolyl				
5366	7-aza-2-	1	COCH ₂ (3-	н	NHSO ₂ Ph
	benzimidazolyl		indolyl)		
5367	7-aza-2-	1	S02-(bi	н	NHSO ₂ Ph
	benzimidazolyl		phenyl)		
5368	7-aza-2-	1	CO ₂ -n-Bu	н	NHSO ₂ Ph
	benzimidazolyl				
5369	7-aza-2-	1	CO ₂ -i-Bu	н	NHSO ₂ Ph
	benzimidazolyl				

5370	7-aza-2-	1	CO ₂ -t-Bu	Н	NHSO2Ph
	benzimidazolyl				
5371	7-aza-2-	1	-(CH ₂) ₄ NH ₂	н	NHSO ₂ Ph
	benzimidazolyl				
5372	7-aza-2-	1	COPh	H	NHSO ₂ Ph
	benzimidazolyl				
5373	7-aza-2-	1	cyclo	Н	NHSO ₂ Ph
	benzimidazolyl		· propyl-		
			methyl		
5374	7-aza-2-	1	so ₂ -n-Bu	Н	NHSO ₂ Ph
	benzimidazolyl				
5375	7-aza-2-	1	Cbz	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5376	7-aza-2-	1	SO ₂ Ph	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5377	7-aza-2-	1	CO(CH2)2Ph	H	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5378	7-aza-2-	1	Bn	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5379	7-aza-2-	1	n-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5380	7-aza-2-	1	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5381	7-aza-2-	1	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5382	7-aza-2-	1	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5383	7-aza-2-	1	-(CH ₂) ₄ NH ₂	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5384	7-aza-2-	1	COPh	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5385	7-aza-2-	1	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
5386	7-aza-2-	1	Cbz	н	NHCbz
	benzimidazolyl				

5387	7-aza-2-	1	SO ₂ Ph	н	NHCbz
	benzimidazolyl				
5388	7-aza-2-	1	CO(CH ₂) ₂ Ph	н	NHCbz
	benzimidazolyl				
5389	7-aza-2-	1	Bn	н	NHCbz
	benzimidazolyl				
5390	7-aza-2-	1	n-Bu	н	NHCbz
	benzimidazolyl				
5391	7-aza-2-	1	CO2-n-Bu	Н	NHCbz
	benzimidazolyl				
5392	7-aza-2-	1	CO ₂ -i-Bu	н	NHCbz
	benzimidazolyl				
5393	7-aza-2-	1	CO ₂ -t-Bu	н	NHCbz
	benzimidazolyl				
5394	7-aza-2-	1	-(CH ₂) ₄ NH ₂	н	NHCbz
	benzimidazolyl				
5395	7-aza-2-	1	COPh	Н	NHCbz
	benzimidazolyl				
5396	7-aza-2-	1	SO ₂ -n-Bu	Н	NHCbz
	benzimidazolyl				
5397	tetrahydropyrimidin	1	Cbz	н	NHSO ₂ Ph
	-2-ylaminomethyl				
5398	tetrahydropyrimidin	1	SO ₂ Ph	н	NHSO ₂ Ph
	-2-ylaminomethyl				
5399	tetrahydropyrimidin	1	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
	-2-ylaminomethyl				
5400	tetrahydropyrimidin	1	Bn	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5401	tetrahydropyrimidin	1	n-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5402	tetrahydropyrimidin	1	COCH ₂ (3-	н	NHSO ₂ Ph
	-2-ylaminomethyl		indolyl)		
5403	tetrahydropyrimidin	1	502-(bi	Н	NHSO ₂ Ph
	-2-ylaminomethyl		phenyl)		

5404	tetrahydropyrimidin	1	CO2-n-Bu	н	NHSO ₂ Ph
	-2-ylaminomethyl				
5405	tetrahydropyrimidin	1	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5406	tetrahydropyrimidin	1	CO ₂ -t-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5407	tetrahydropyrimidin	1	-(CH2)4NH2	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
5408	tetrahydropyrimidin	1	COPh	н	NHSO2Ph
	-2-ylaminomethyl				
5409	tetrahydropyrimidin	1	cyclo	Н	NHSO ₂ Ph
	2-ylaminomethyl		propyl-		
			methyl		
5410	tetrahydropyrimidin	1	so ₂ -n-Bu	H	NHSO ₂ Ph
	-2-ylaminomethyl				
5411	tetrahydropyrimidin	1	Cbz	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5412	tetrahydropyrimidin	1	SO ₂ Ph	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5413	tetrahydropyrimidin	1	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5414	tetrahydropyrimidin	1	Bn	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5415	tetrahydropyrimidin	1	n-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5416	tetrahydropyrimidin	1	CO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5417	tetrahydropyrimidin	1	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5418	tetrahydropyrimidin	1	CO ₂ -t-Bu	H	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5419	tetrahydropyrimidin	1	- (CH ₂) 4NH ₂	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5420	tetrahydropyrimidin	1	COPh	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)

5421	tetrahydropyrimidin	1	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
5422	tetrahydropyrimidin	1	Cbz	н	NHCbz
	-2-ylaminomethyl				
5423	tetrahydropyrimidin	1	SO ₂ Ph	Н	NHCbz
	-2-ylaminomethyl				
5424	tetrahydropyrimidin	1	CO(CH ₂) ₂ Ph	н	NHCbz
	-2-ylaminomethyl				
5425	tetrahydropyrimidin	1	Bn	н	NHCbz
	-2-ylaminomethyl				
5426	tetrahydropyrimidin	1	n-Bu	н	NHCbz
	-2-ylaminomethyl	•			
5427	tetrahydropyrimidin	1	CO2-n-Bu	Н	NHCbz
	-2-ylaminomethyl				
5428	tetrahydropyrimidin	1	CO ₂ -i-Bu	H	NHCbz
	-2-ylaminomethyl				
5429	tetrahydropyrimidin	1	CO ₂ -t-Bu	Н	NHCbz
	-2-ylaminomethyl				
5430	tetrahydropyrimidin	1	-(CH2)4NH2	Н	NHCbz
	-2-ylaminomethyl				
5431	tetrahydropyrimidin	1	COPh	Н	NHCbz
	-2-ylaminomethyl				
5432	tetrahydropyrimidin	1	SO ₂ -n-Bu	Н	NHCbz
	-2-ylaminomethyl				

<u>Table 6</u>

Ex. No.	R1	I	R ^{10a}	R ¹⁴	R ¹⁵
6001	2-pyridinylamino- methyl	0	Cbz	н	NHSO2Ph
6002	2-pyridinylamino- methyl	0	SO ₂ Ph	н	NHSO2Ph
6003	2-pyridinylamino- methyl	0	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
6004	2-pyridinylamino- methyl	0	Bn	н	NHSO ₂ Ph
6005	2-pyridinylamino- methyl	0	n-Bu	н	NHSO ₂ Ph
6006	2-pyridinylamino- methyl	0	COCH ₂ (3-indoly1)	H	NHSO ₂ Ph
6007	2-pyridinylamino- methyl	0	SO2-	н	NHSO ₂ Ph
6008	2-pyridinylamino- methyl	0	CO ₂ -n-Bu	н	NHSO ₂ Ph
6009	2-pyridinylamino- methyl	0	CO ₂ -i-Bu	н	NHSO ₂ Ph
6010	2-pyridinylamino- methyl	0	CO ₂ -t-Bu	Н	NHSO2Ph
6011	2-pyridinylamino- methyl	0	-(CH ₂) ₄ NH ₂	н	NHSO2Ph
6012	2-pyridinylamino- methyl	0	COPh	Н	NHSO2Ph

6013	2-pyridinylamino-	0	cyclopropyl-	Н	NHSO ₂ Ph
	methyl		methyl		
6014	2-pyridinylamino-	0	so ₂ -n-Bu	Н	NHSO ₂ Ph
	methy1				
6015	2-pyridinylamino-	0	Cbz	н	NHSO2-(2,4,6-
	methyl		4		trimethylphenyl)
6016	2-pyridinylamino-	0	SO ₂ Ph	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6017	2-pyridinylamino-	0	CO(CH ₂) ₂ Ph	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6018	2-pyridinylamino-	0	Bn	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6019	2-pyridinylamino-	0	n-Bu	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6020	2-pyridinylamino-	0	CO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6021	2-pyridinylamino-	0	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6022	2-pyridinylamino-	0	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6023	2-pyridinylamino-	0	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6024	2-pyridinylamino-	0	COPh	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6025	2-pyridinylamino-	0	SO ₂ -n-Bu	H	NHSO2-(2,4,6-
	methyl		•		trimethylphenyl)
6026	2-pyridinylamino-	0	Cbz	H	NHCbz
	methyl				
6027	2-pyridinylamino-	0	SO ₂ Ph	Н	NHCbz
	methyl				
6028	2-pyridinylamino-	0	CO(CH ₂) ₂ Ph	н	NHCbz
	methyl				
6029	2-pyridinylamino-	0	Bn	н	NHCbz
	methyl				

2-pyridinylamino- methyl	0	n-Bu	н	NHCbz
2-pyridinylamino- methyl	0	CO ₂ -n-Bu	н	NHCbz
2-pyridinylamino- methyl	0	CO ₂ -i-Bu	н	NHCbz
2-pyridinylamino- methyl	0	CO ₂ -t-Bu	Н	NHCbz
2-pyridinylamino- methyl	0	-(CH ₂) ₄ NH ₂	Н	NHCbz
2-pyridinylamino- methyl	0	COPh	н	NHCbz
2-pyridinylamino- methyl	0	SO ₂ -n-Bu	н ·	NHCbz
2-imidazolylamino- methyl	0	Cbz	н	NHSO ₂ Ph
2-imidazolylamino-	0	SO ₂ Ph	н	NHSO ₂ Ph
2-imidazolylamino-	0	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
2-imidazolylamino-	0	Bn	н	NHSO ₂ Ph
2-imidazolylamino-	. 0	n-Bu	н	NHSO ₂ Ph
2-imidazolylamino-	0	COCH ₂ (3-	н	NHSO ₂ Ph
2-imidazolylamino-	0	SO2-	н	NHSO ₂ Ph
2-imidazolylamino-	0	CO ₂ -n-Bu	н	NHSO ₂ Ph
2-imidazolylamino-	0	CO ₂ -i-Bu	н	NHSO ₂ Ph
-	0	CO ₂ -t-Bu	н	NHSO ₂ Ph
	methyl 2-pyridinylaminomethyl 2-pyridinylaminomethyl 2-pyridinylaminomethyl 2-pyridinylaminomethyl 2-pyridinylaminomethyl 2-pyridinylaminomethyl 2-imidazolylaminomethyl	methyl 2-pyridinylamino- methyl 2-imidazolylamino- methyl	methyl 2-pyridinylamino- 0 CO2-n-Bu methyl 2-pyridinylamino- 0 CO2-i-Bu methyl 2-pyridinylamino- 0 CO2-t-Bu methyl 2-pyridinylamino- 0 CO2-t-Bu methyl 2-pyridinylamino- 0 COPh methyl 2-pyridinylamino- 0 COPh methyl 2-pyridinylamino- 0 CD2 methyl 2-imidazolylamino- 0 CD2 methyl 2-imidazolylamino- 0 CO(CH2)2Ph methyl 2-imidazolylamino- 0 Bn methyl 2-imidazolylamino- 0 n-Bu methyl 2-imidazolylamino- 0 n-Bu methyl 2-imidazolylamino- 0 COCH2(3-indolyl) 2-imidazolylamino- 0 SO2- methyl indolyl) 2-imidazolylamino- 0 COCH2(3-indolyl) 2-imidazolylamino- 0 CO2-n-Bu methyl 2-imidazolylamino- 0 CO2-n-Bu methyl 2-imidazolylamino- 0 CO2-i-Bu methyl 2-imidazolylamino- 0 CO2-i-Bu methyl	methyl 2-pyridinylamino- 0 CO2-n-Bu H methyl 2-pyridinylamino- 0 CO2-i-Bu H methyl 2-pyridinylamino- 0 CO2-t-Bu H methyl 2-pyridinylamino- 0 COPh H methyl 2-pyridinylamino- 0 COPh H methyl 2-pyridinylamino- 0 COPh H methyl 2-imidazolylamino- 0 CDz H methyl 2-imidazolylamino- 0 COCH2)2Ph H methyl 2-imidazolylamino- 0 Bn H methyl 2-imidazolylamino- 0 n-Bu H methyl 2-imidazolylamino- 0 COCH2(3- H methyl 2-imidazolylamino- 0 SO2- H methyl 2-imidazolylamino- 0 SO2- H methyl 2-imidazolylamino- 0 SO2- H methyl 2-imidazolylamino- 0 COCH2(3- H methyl 2-imidazolylamino- 0 COCH2(3- H methyl 2-imidazolylamino- 0 CO2-i-Bu H

6047	2-imidazolylamino- methyl	0	- (CH ₂) 4NH ₂	Н	NHSO ₂ Ph
6048	2-imidazolylamino- methyl	0	COPh	н	NHSO ₂ Ph
6049	2-imidazolylamino-	0	cyclopropyl- methyl	н	NHSO ₂ Ph
6050	methyl 2-imidazolylamino-	0	SO ₂ -n-Bu	н	NHSO ₂ Ph
6051	methyl 2-imidazolylamino-	0	Cbz	н	NHSO ₂ -(2,4,6-
6052	methyl 2-imidazolylamino-	0	so ₂ Ph	н	NHSO ₂ -(2,4,6-
6053	methyl 2-imidazolylamino-	0	CO(CH ₂) ₂ Ph	н .	trimethylphenyl) NHSO ₂ -(2,4,6-
6054	methyl 2-imidazolylamino-	0	Bn	н	trimethylphenyl) NHSO ₂ -(2,4,6-
6055	methyl 2-imidazolylamino-	0	n-Bu	н	trimethylphenyl) NHSO ₂ -(2,4,6-
6056	methyl 2-imidazolylamino-	0	CO ₂ -n-Bu	н	trimethylphenyl) NHSO2-(2,4,6-
6057	methyl 2-imidazolylamino-	0	CO ₂ -i-Bu	н	trimethylphenyl) NHSO2-(2,4,6-
6058	methyl 2-imidazolylamino-	0	CO2-t-Bu	H	trimethylphenyl) NHSO ₂ -(2,4,6-
	methyl	0	-	н	trimethylphenyl) NHSO2-(2,4,6-
6059	2-imidazolylamino- methyl				trimethylphenyl)
6060	2-imidazolylamino- methyl	0	COPh	н	NHSO ₂ -(2,4,6- trimethylphenyl)
6061	2-imidazolylamino- methyl	0	SO ₂ -n-Bu	Н	NHSO ₂ -(2,4,6- trimethylphenyl)
6062	2-imidazolylamino- methyl	0	Cbz	H	NHCbz
6063	2-imidazolylamino- methyl	0	SO ₂ Ph	н	NHCbz

6064	2-imidazolylamino- methyl	0	CO(CH ₂) ₂ Ph	н	NHCbz
6065	2-imidazolylamino- methyl	0	Bn	н	NHCbz
6066	2-imidazolylamino- methyl	0	n-Bu	н	NHCbz
6067	2-imidazolylamino- methyl	0	CO ₂ -n-Bu	н	NHCbz
6068	2-imidazolylamino- methyl	0	CO ₂ -i-Bu	Н	NHCbz
6069	2-imidazolylamino- methyl	0	CO ₂ -t-Bu	н	NHCbz
6070	2-imidazolylamino- methyl	0	-(CH ₂) ₄ NH ₂	Н	NHCbz
6071	2-imidazolylamino- methyl	0	COPh	н	NHCbz
6072	2-imidazolylamino- methyl	0	SO ₂ -n-Bu	Н	NHCbz
6073	2-imidazolinyl- aminomethyl	0	Cbz	н	NHSO ₂ Ph
6074	2-imidazolinyl- aminomethyl	0	SO ₂ Ph	н	NHSO ₂ Ph
6075	2-imidazolinyl- aminomethyl	0	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
6076	2-imidazolinyl- aminomethyl	0	Bn	Н	NHSO ₂ Ph
6077	2-imidazolinyl- aminomethyl	0	n-Bu	н	NHSO2Ph
6078	2-imidazolinyl- aminomethyl	0	COCH ₂ (3-indolyl)	н	NHSO2Ph
6079	2-imidazolinyl- aminomethyl	0	SO2-	н	NHSO2Ph
6080	2-imidazolinyl- aminomethyl	0	CO ₂ -n-Bu	н	NHSO ₂ Ph

6081	2-imidazolinyl-	0.	CO ₂ -i-Bu	н	NHSO ₂ Ph
6082	aminomethyl 2-imidazolinyl-	0	CO ₂ -t-Bu	н	NHSO ₂ Ph
	aminomethyl		-		•
6083	2-imidazolinyl-	0	- (CH ₂) 4NH ₂	Н	NHSO2Ph
	aminomethyl				
6084	2-imidazolinyl-	0	COPh	н	NHSO2Ph
	aminomethyl				
6085	2-imidazolinyl-	0	cyclopropyl-	H	NHSO ₂ Ph
	aminomethyl		methyl		
6086	2-imidazolinyl-	0	SO ₂ -n-Bu	Н	NHSO2Ph
	aminomethyl				
6087	2-imidazolinyl-	0	Cbz	H ·	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6088	2-imidazolinyl-	0	SO ₂ Ph	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6089	2-imidazolinyl-	0	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6090	2-imidazolinyl-	0	Bn	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6091	2-imidazolinyl-	0	n-Bu	н	NHSO ₂ -(2,4,6-
	aminomethyl		•		trimethylphenyl)
6092	2-imidazolinyl-	0	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6093	2-imidazolinyl-	0	CO ₂ -i-Bu	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6094	2-imidazolinyl-	0	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6095	2-imidazolinyl-	0	-(CH ₂) ₄ NH ₂	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6096	2-imidazolinyl-	0	COPh	Н	NHSO2-(2,4,6-
	aminomethyl			-	trimethylphenyl)
6097	2-imidazolinyl-	0	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)

6098	2-imidazolinyl- aminomethyl	0	Cbz	н	NHCb2
6099	2-imidazolinyl- aminomethyl	0	SO ₂ Ph	н	NHCbz
6100	2-imidazolinyl- aminomethyl	0	CO(CH ₂) ₂ Ph	Н	NHCbz
6101	2-imidazolinyl- aminomethyl	0	Bn	н	NHCbz
6102	2-imidazolinyl- aminomethyl	0	n-Bu	н	NHCbz
6103	2-imidazolinyl- aminomethyl	0	'CO ₂ -n-Bu	Н	NHCbz
6104	2-imidazolinyl- aminomethyl	0	CO ₂ -i-Bu	н .	NHCbz
6105	2-imidazolinyl- aminomethyl	0	CO ₂ -t-Bu	Н	NHCbz
6106	2-imidazolinyl- aminomethyl	0	-(CH ₂) ₄ NH ₂	н	NHCbz
6107	2-imidazolinyl- aminomethyl	0	COPh	H .	NHCbz
6108	2-imidazolinyl- aminomethyl	0	SO ₂ -n-Bu	Н	NHCbz
6109	2-benzimidazolyl- aminomethyl	0	Cbz	н	NHSO ₂ Ph
6110	2-benzimidazolyl- aminomethyl	0	SO ₂ Ph	н	NHSO2Ph
6111	2-benzimidazolyl- aminomethyl	0	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
6112	2-benzimidazolyl- aminomethyl	0	Bn	н	NHSO ₂ Ph
6113	2-benzimidazolyl- aminomethyl	0	n-Bu	Н	NHSO ₂ Ph
6114	2-benzimidazolyl- aminomethyl	0	COCH ₂ (3-indolyl)	н	NHSO2Ph

6115	2-benzimidazolyl-	0	SO2-	н	NHSO ₂ Ph
	aminomethyl		(biphenyl)		
6116	2-benzimidazolyl-	0	CO ₂ -n-Bu	Н	NHSO ₂ Ph
	aminomethyl				
6117	2-benzimidazolyl-	0	CO ₂ -i-Bu	н	NHSO2Ph
	aminomethyl				
6118	2-benzimidazolyl-	0	CO ₂ -t-Bu	Н	NHSO2Ph
	aminomethyl				
6119	2-benzimidazolyl-	0	- (CH ₂) 4NH ₂	н	NHSO2Ph
	aminomethyl				
6120	2-benzimidazolyl-	0	COPh	н	NHSO ₂ Ph
	aminomethyl				
6121	2-benzimidazolyl-	0	cyclopropyl-	H .	NHSO2Ph
	aminomethyl		methyl		
6122	2-benzimidazolyl-	0	so ₂ -n-Bu	н	NHSO ₂ Ph
	aminomethyl				
6123	2-benzimidazolyl-	0	Cbz	H	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6124	2-benzimidazolyl-	0	SO ₂ Ph	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6125	2-benzimidazolyl-	0	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6126	2-benzimidazolyl-	0	Bn	H	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6127	2-benzimidazolyl-	0	n-Bu	H	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6128	2-benzimidazolyl-	0	CO2-n-Bu	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6129	2-benzimidazolyl-	0	CO ₂ -i-Bu	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6130	2-benzimidazolyl-	0	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6131	2-benzimidazolyl-	0	-(CH2)4NH2	н	NHSO2-(2,4,6-
	aminomethyl		•		trimethylphenyl)

6132	2-benzimidazolyl-	0	COPh	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6133	2-benzimidazolyl-	0	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6134	2-benzimidazolyl-	0	Cbz	Н	NHCbz
	aminomethyl				
6135	2-benzimidazolyl-	0	SO ₂ Ph	н	NHCbz
	aminomethyl				
6136	2-benzimidazolyl-	0	CO(CH ₂) ₂ Ph	н	NHCbz
	aminomethyl				
6137	2-benzimidazolyl-	0	Bn	Н	NHCbz
	aminomethyl				
6138	2-benzimidazolyl-	0	n-Bu	Н	NHCbz
	aminomethyl				
6139	2-benzimidazolyl-	0	CO ₂ -n-Bu	н	NHCbz
	aminomethyl				
6140	2-benzimidazolyl-	Ó	CO ₂ -i-Bu	Н	NHCbz
	aminomethyl				
6141	2-benzimidazolyl-	0	CO ₂ -t-Bu	н	NHCbz
	aminomethyl				
6142	2-benzimidazolyl-	0	-(CH ₂) ₄ NH ₂	н	NHCbz
	aminomethyl				
6143	2-benzimidazolyl-	0	COPh	Н	NHCbz
	aminomethyl				
6144	2-benzimidazolyl-	0	so ₂ -n-Bu	Н	NHCbz
	aminomethyl				
6145	7-aza-2-	0	Cbz	Н	NHSO ₂ Ph
	benzimidazolyl				
6146	7-aza-2 -	0	SO ₂ Ph	Н	NHSO ₂ Ph
	benzimidazolyl				
6147	7-aza-2-	0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
	benzimidazolyl				
6148	7-aza-2-	0	Bn	Н	NHSO ₂ Ph
	benzimidazolyl				

6149	7-aza-2-	0	n-Bu	н	NHSO ₂ Ph
	benzimidazolyl				
6150	7-aza-2-	0	COCH ₂ (3-	н	NHSO ₂ Ph
	benzimidazolyl		indolyl)		
6151	7-aza-2-	0	SO2-	Н	NHSO ₂ Ph
	benzimidazolyl		(biphenyl)		
6152	7-aza-2-	0	CO ₂ -n-Bu	Н	NHSO ₂ Ph
	benzimidazolyl				
6153	7-aza-2-	0	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	benzimidazolyl				
6154	7-aza-2-	0	CO ₂ -t-Bu	Н	NHSO2Ph
	benzimidazolyl				
6155	7-aza-2-	0	-(CH2)4NH2	н	NHSO2Ph
	benzimidazolyl				
6156	7-aza-2-	0	COPh	н	NHSO2Ph
	benzimidazolyl				
6157	7-aza-2-	0	cyclopropyl-	Н	NHSO2Ph
	benzimidazolyl		methyl		
6158	7-aza-2-	0	SO ₂ -n-Bu	н	NHSO2Ph
	benzimidazolyl				
6159	7-aza-2-	0	Cbz	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6160	7-aza-2-	0	SO ₂ Ph	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6161	7-aza-2-	0	$CO(CH_2)_2Ph$	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6162	7-aza-2-	0	Bn	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6163	7-aza-2-	0	n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6164	7-aza-2-	0	CO2-n-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6165	7-aza-2-	0	CO ₂ -i-Bu	H	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)

6166	7-aza-2-	0.	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6167	7-aza-2-	0	-(CH ₂) ₄ NH ₂	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6168	7-aza-2-	0	COPh	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6169	7-aza-2-	0	SO ₂ -n-Bu	H	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6170	7-aza-2-	0	Cbz	н	NHCbz
	benzimidazolyl				
6171	7-aza-2-	0	SO ₂ Ph	Н	NHCbz
	benzimidazolyl				
6172	7-aza-2-	0	CO(CH ₂) ₂ Ph	н	NHCbz
	benzimidazolyl				
6173	7-aza-2-	0	Bn	Н	NHCbz
	benzimidazolyl				
6174	7 - aza-2-	0	n-Bu	н	NHCbz
	benzimidazolyl				
6175	7-aza-2-	0	CO ₂ -n-Bu	Н	NHCbz
	benzimidazolyl				
6176	7-aza-2-	0	CO ₂ -i-Bu	H	NHCbz
	benzimidazolyl				
6177	7-aza-2-	0	CO ₂ -t-Bu	Н	NHCbz
	benzimidazolyl				
6178	7-aza-2-	0	-(CH2)4NH2	Н	NHCbz
	benzimidazolyl				
6179	7-aza-2-	0	COPh	Н	NHCbz
	benzimidazolyl				
6180	7-aza-2-	0	SO ₂ -n-Bu	Н	NHCbz
	benzimidazolyl				
6181	${\tt tetrahydropyrimidin}$	0	Cbz	н	NHSO2Ph
	-2-ylaminomethyl				
6182	${\tt tetrahydropyrimidin}$	0	SO ₂ Ph	Н	NHSO ₂ Ph
	-2-ylaminomethyl				

6183	tetrahydropyrimidin	0	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
	-2-ylaminomethyl				
6184	tetrahydropyrimidin	0	Bn	н	NHSO ₂ Ph
	-2-ylaminomethyl				
6185	${\tt tetrahydropyrimidin}$	0	n-Bu	н	NHSO ₂ Ph
	-2-ylaminomethyl				
6186	${\tt tetrahydropyrimidin}$	0	COCH ₂ (3-	H	NHSO2Ph
	-2-ylaminomethyl		indolyl)		
6187	tetrahydropyrimidin	0	SO2-	Н	NHSO ₂ Ph
	-2-ylaminomethyl		(biphenyl)		
6188	${\tt tetrahydropyrimidin}$	0	CO ₂ -n-Bu	Н	NHSO2Ph
	-2-ylaminomethyl				
6189	${\tt tetrahydropyrimidin}$	0	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
6190	tetrahydropyrimidin	0	CO ₂ -t-Bu	н	NHSO ₂ Ph
	-2-ylaminomethyl				
6191	tetrahydropyrimidin	0	- (CH ₂) 4NH ₂	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
6192	${\tt tetrahydropyrimidin}$	0	COPh	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
6193	tetrahydropyrimidin	0	cyclopropyl-	Н	NHSO ₂ Ph
	-2-ylaminomethyl		methyl		
6194	tetrahydropyrimidin	0	SO2-n-Bu	н	NHSO ₂ Ph
	-2-ylaminomethyl				
6195	tetrahydropyrimidin	0	Cbz	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6196	tetrahydropyrimidin	0	SO ₂ Ph	Н	NHSO ₂ -(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6197	tetrahydropyrimidin	0	CO(CH ₂) ₂ Ph	Н	NHSO ₂ -(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6198	tetrahydropyrimidin	0	Bn	н	NHSO ₂ -(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6199	tetrahydropyrimidin	0	n-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)

6200	tetrahydropyrimidin	0	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6201	tetrahydropyrimidin	0	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6202	tetrahydropyrimidin	0	CO ₂ -t-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6203	tetrahydropyrimidin	0	-(CH2)4NH2	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6204	tetrahydropyrimidin	0	COPh	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6205	tetrahydropyrimidin	0	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6206	tetrahydropyrimidin	0	Cbz	H	NHCbz
	-2-ylaminomethyl				
6207	tetrahydropyrimidin	0	SO ₂ Ph	-H	NHCbz
	-2-ylaminomethyl				
6208	tetrahydropyrimidin	0	CO(CH ₂) ₂ Ph	H	NHCbz
	-2-ylaminomethyl				
6209	tetrahydropyrimidin	0	Bn	н	NHCbz
	-2-ylaminomethyl				
6210	tetrahydropyrimidin	0	n-Bu	н	NHCbz
	-2-ylaminomethyl				
6211	tetrahydropyrimidin	0	CO ₂ -n-Bu	н	NHCbz
	-2-ylaminomethyl				
6212	${\tt tetrahydropyrimidin}$	0	CO ₂ -i-Bu	н	NHCbz
	-2-ylaminomethyl				
6213	tetrahydropyrimidin	0	CO ₂ -t-Bu	н	NHCbz
	-2-ylaminomethyl				
6214	tetrahydropyrimidin	0	-(CH2)4NH2	н	NHCbz
	-2-ylaminomethyl				
6215	tetrahydropyrimidin	0	COPh	Н	NHCbz
	-2-ylaminomethyl				
6216	tetrahydropyrimidin	0	SO ₂ -n-Bu	Н	NHCbz
	-2-ylaminomethyl				

6217	2-pyridinylamino- methyl	1	Cbz	Н	NHSO ₂ Ph
6218	2-pyridinylamino- methyl	1	so ₂ Ph	н	NHSO ₂ Ph
6219	2-pyridinylamino- methyl	1	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
6220	2-pyridinylamino- methyl	1	Bn	Н	NHSO ₂ Ph
6221	2-pyridinylamino- methyl	1	n-Bu	н	NHSO ₂ Ph
6222	2-pyridinylamino-	1	COCH ₂ (3-	Н	NHSO ₂ Ph
	methyl		indolyl)		
6223	2-pyridinylamino-	1	so2 -	Н	NHSO ₂ Ph
	methy1		(biphenyl)		•
6224	2-pyridinylamino- methyl	1	CO ₂ -n-Bu	Н	NHSO ₂ Ph
6225	2-pyridinylamino- methyl	1	CO ₂ -i-Bu	Н	NHSO ₂ Ph
6226	2-pyridinylamino- methyl	1	CO ₂ -t-Bu	н	NHSO ₂ Ph
6227	2-pyridinylamino- methyl	1	-(CH ₂) ₄ NH ₂	Н	NHSO ₂ Ph
6228	2-pyridinylamino- methyl	1	COPh	н	NHSO ₂ Ph
6229	2-pyridinylamino-	1	cyclopropyl-	н	NHSO ₂ Ph
	methyl		methyl		
6230	2-pyridinylamino- methyl	1	SO ₂ -n-Bu	Н	NHSO ₂ Ph
6231	2-pyridinylamino-	1	Cbz	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6232	2-pyridinylamino-	1	SO ₂ Ph	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6233	2-pyridinylamino-	1	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)

6234	2-pyridinylamino-	1	Bn	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6235	2-pyridinylamino-	1	n-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6236	2-pyridinylamino-	1	CO2-n-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6237	2-pyridinylamino-	1	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6238	2-pyridinylamino-	1	CO ₂ -t-Bu	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6239	2-pyridinylamino-	1	- (CH ₂) 4NH ₂	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6240	2-pyridinylamino-	1	COPh	н	NHSO2-(2,4,6-
	methyl			•	trimethylphenyl)
6241	2-pyridinylamino-	1	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6242	2-pyridinylamino-	1	Cbz	н	NHCbz
	methyl				
6243	2-pyridinylamino-	1	SO ₂ Ph	Н	NHCbz
	methyl				
6244	2-pyridinylamino-	1	$CO(CH_2)_2Ph$	Н	NHCbz
	methyl				•
6245	2-pyridinylamino-	1	Bn	Н	NHCbz
	methyl				
6246	2-pyridinylamino-	1	n-Bu	Н	NHCbz
	methyl				
6247	2-pyridinylamino-	1	CO ₂ -n-Bu	Н	NHCbz
	methyl				
6248	2-pyridinylamino-	1	CO ₂ -i-Bu	Н	NHCbz
	methyl				
6249	2-pyridinylamino-	1	CO ₂ -t-Bu	Н	NHCbz
	methyl				
6250	2-pyridinylamino-	1	-(CH2)4NH2	Н	NHCbz
	methyl				

6251	2-pyridinylamino- methyl	1.	COPh	н	NHCbz
6252	2-pyridinylamino- methyl	1	SO ₂ -n-Bu	н	NHCbz
6253	2-imidazolylamino- methyl	1	Cbz	н	NHSO2Ph
6254	2-imidazolylamino- methyl	1	SO ₂ Ph	Н	NHSO ₂ Ph
6255	2-imidazolylamino- methyl	1	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
6256	2-imidazolylamino- methyl	1	Bn	н	NHSO ₂ Ph
6257	2-imidazolylamino- methyl	1	n-Bu	н	NHSO ₂ Ph
6258	2-imidazolylamino- methyl	1	COCH ₂ (3-indoly1)	н	NHSO ₂ Ph
6259	2-imidazolylamino- methyl	1	SO2-	н	NHSO2Ph
6260	2-imidazolylamino- methyl	1	CO ₂ -n-Bu	н	NHSO2Ph
6261	_	1	CO ₂ -i-Bu	н	NHSO ₂ Ph
6262	2-imidazolylamino- methyl	1	CO ₂ -t-Bu	Н	NHSO2Ph
6263	2-imidazolylamino- methyl	1	-(CH ₂) ₄ NH ₂	н	NHSO2Ph
6264	2-imidazolylamino- methyl	1	COPh	Н	NHSO ₂ Ph
6265	2-imidazolylamino- methyl	1	cyclopropyl- methyl	н	NHSO ₂ Ph
6266	2-imidazolylamino- methyl	1	SO ₂ -n-Bu	н	NHSO ₂ Ph
6267	_	1	Cbz	Н	NHSO ₂ -(2,4,6-
	methyl				trimethylphenyl)

6268	2-imidazolylamino-	1	SO ₂ Ph	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6269	2-imidazolylamino-	1	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6270	2-imidazolylamino-	1	Bn	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6271	2-imidazolylamino-	1	n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6272	2-imidazolylamino-	1	CO2-n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6273	2-imidazolylamino-	1	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6274	2-imidazolylamino-	1	CO ₂ -t-Bu	H	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6275	2-imidazolylamino-	1	- (CH ₂) 4NH ₂	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6276	2-imidazolylamino-	1	COPh	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6277	2-imidazolylamino-	1	so ₂ -n-Bu	Н	NHSO2-(2,4,6-
	methyl				trimethylphenyl)
6278	2-imidazolylamino-	1	Cbz	Н	NHCbz
	methyl				
6279	2-imidazolylamino-	1	SO ₂ Ph	Н	NHCbz
	methyl				
6280	2-imidazolylamino-	1	CO(CH ₂) ₂ Ph	Н	NHCbz
	methyl				
6281	2-imidazolylamino-	1	Bn	H .	NHCbz
	methyl				
6282	2-imidazolylamino-	1	n-Bu	Н	NHCbz
	methyl				
6283	2-imidazolylamino-	1	CO ₂ -n-Bu	Н	NHCbz
	methyl				
6284	2-imidazolylamino-	1	CO2-i-Bu	н	NHCbz
	methyl				

6285	2-imidazolylamino- methyl	1	CO ₂ -t-Bu	Н	NHCbz
6286	2-imidazolylamino- methyl	1	- (CH ₂) ₄ NH ₂	Н	NHCbz
6287	2-imidazolylamino- methyl	1	COPh	н	NHCbz
6288	2-imidazolylamino- methyl	1	so ₂ -n-Bu	Н	NHCbz
6289	2-imidazolinyl- aminomethyl	1	Cbz	Н	NHSO ₂ Ph
6290	2-imidazolinyl- aminomethyl	1	SO ₂ Ph	н	NHSO ₂ Ph
6291	2-imidazolinyl- aminomethyl	1	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
6292	2-imidazolinyl- aminomethyl	1	Bn	н	NHSO2Ph
6293	2-imidazolinyl- aminomethyl	1	n-Bu	Н	NHSO2Ph
6294	2-imidazolinyl- aminomethyl	1	COCH ₂ (3-indoly1)	н	NHSO2Ph
6295	2-imidazolinyl- aminomethyl	1	SO2-	н	NHSO2Ph
6296	2-imidazolinyl- aminomethyl	1	CO ₂ -n-Bu	н	NHSO2Ph
6297	2-imidazolinyl- aminomethyl	1	CO ₂ -i-Bu	н	NHSO ₂ Ph
6298	2-imidazolinyl- aminomethyl	1	CO ₂ -t-Bu	Н	NHSO2Ph
6299	2-imidazolinyl- aminomethyl	1	-(CH ₂) ₄ NH ₂	н	NHSO ₂ Ph
6300	2-imidazolinyl- aminomethyl	1	COPh	н	NHSO ₂ Ph
6301	2-imidazolinyl- aminomethyl	1	cyclopropyl- methyl	н	NHSO2Ph

6302	2-imidazolinyl-	1	SO ₂ -n-Bu	н	NHSO ₂ Ph
	aminomethyl				
6303	2-imidazolinyl-	1	Cbz	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6304	2-imidazolinyl-	1	SO ₂ Ph	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6305	2-imidazolinyl-	1	CO(CH ₂) ₂ Ph	н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6306	2-imidazolinyl-	1	Bn	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6307	2-imidazolinyl-	1	n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6308	2-imidazolinyl-	1	CO ₂ -n-Bu	Н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6309	2-imidazolinyl-	1	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6310	2-imidazolinyl-	1	CO ₂ -t-Bu	H	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6311	2-imidazolinyl-	1	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6312	2-imidazolinyl-	1	COPh	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6313	2-imidazolinyl-	1	SO ₂ -n-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6314	2-imidazolinyl-	1	Cbz	Н	NHCbz
	aminomethyl				
6315	2-imidazolinyl-	1	SO ₂ Ph	H	NHCbz
	aminomethyl				
6316	2-imidazolinyl-	1	CO(CH ₂) ₂ Ph	Н	NHCbz
	aminomethyl				
6317	2-imidazolinyl-	1	Bn	н	NHCbz
	aminomethyl				
6318	2-imidazolinyl-	1	n-Bu	н	NHCbz
	aminomethyl				

6319	2-imidazolinyl- aminomethyl	1	CO ₂ -n-Bu	н	NHCbz
6320	2-imidazolinyl-	1	CO ₂ -i-Bu	н	NHCbz
	aminomethyl				
6321	2-imidazolinyl-	1	CO ₂ -t-Bu	Н	NHCbz
	aminomethyl				
6322	2-imidazolinyl-	1	-(CH2)4NH2	н	NHCbz
	aminomethyl				
6323	2-imidazolinyl-	1	COPh	н	NHCbz
	aminomethyl				
6324	2-imidazolinyl-	1	SO ₂ -n-Bu	Н	NHCbz
•	- aminomethyl				
6325	2-benzimidazolyl-	1	Cbz	Н	NHSO ₂ Ph
	aminomethyl				
6326	2-benzimidazolyl-	1	SO ₂ Ph	Н	NHSO ₂ Ph
	aminomethyl				
6327	2-benzimidazolyl-	1	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
	aminomethyl				
6328	2-benzimidazolyl-	1	Bn	H	NHSO ₂ Ph
	aminomethyl				
6329	2-benzimidazolyl-	1	n-Bu	H	NHSO ₂ Ph
	aminomethyl				
6330	2-benzimidazolyl-	1	COCH ₂ (3-	н	NHSO ₂ Ph
	aminomethyl		indolyl)		
6331	2-benzimidazoly1-	1	S 02-	н	NHSO ₂ Ph
	aminomethyl		(biphenyl)		
6332	2-benzimidazolyl-	1	CO2-n-Bu	Н	NHSO ₂ Ph
	aminomethyl				
6333	2-benzimidazolyl-	1	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	aminomethyl				
6334	2-benzimidazolyl-	1	CO ₂ -t-Bu	Н	NHSO2Ph
	aminomethyl				
6335	2-benzimidazolyl-	1	-(CH2)4NH2	Н	NHSO2Ph
	aminomethyl				

6336	2-benzimidazolyl-	1.	COPh	н	NHSO2Ph
	aminomethyl				
6337	2-benzimidazolyl-	1	cyclopropyl-	Н	NHSO2Ph
	aminomethyl		methyl		
6338	2-benzimidazoly1-	1	SO ₂ -n-Bu	н	NHSO2Ph
	aminomethyl				
6339	2-benzimidazolyl-	1	Cbz	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6340	2-benzimidazolyl-	1	SO ₂ Ph	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6341	2-benzimidazolyl-	1	CO(CH ₂) ₂ Ph	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6342	2-benzimidazolyl-	1	Bn	н -	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6343	2-benzimidazolyl-	1	n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6344	2-benzimidazolyl-	1	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6345	2-benzimidazolyl-	1	CO ₂ -i-Bu	н	NHSO ₂ -(2,4,6-
	aminomethyl				trimethylphenyl)
6346	2-benzimidazolyl-	1	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6347	2-benzimidazolyl-	1	-(CH2)4NH2	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6348	2-benzimidazolyl-	1	COPh	Н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6349	2-benzimidazoly1-	1	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	aminomethyl				trimethylphenyl)
6350	2-benzimidazolyl-	1	Cbz	н	NHCbz
	aminomethyl				
6351	2-benzimidazolyl-	1	SO ₂ Ph	Н	NHCbz
	aminomethyl		•		
6352	2-benzimidazolyl-	1	CO(CH ₂) ₂ Ph	Н	NHCbz
	aminomethyl				

6353	2-benzimidazolyl- aminomethyl	1	Bn	н	NHCbz
6354	2-benzimidazolyl-	1	n-Bu	н	NHCbz
6355	aminomethyl 2-benzimidazolyl-	1	CO ₂ -n-Bu	н	NHCbz
6356	aminomethyl 2-benzimidazolyl-	1	CO ₂ -i-Bu	н	NHCbz
6357	aminomethyl 2-benzimidazolyl-	1	CO ₂ -t-Bu	Н	NHCbz
6358	aminomethyl 2-benzimidazolyl-	1	-(CH ₂) ₄ NH ₂	н	NHCbz
6359	aminomethyl 2-benzimidazolyl-	1	COPh	н	NHCbz
6360	aminomethyl 2-benzimidazolyl-	1	so ₂ -n-Bu	н	NHCbz
6361	aminomethyl 7-aza-2-	1	Cbz	н	NHSO ₂ Ph
6362	benzimidazolyl 7-aza-2-	1	SO ₂ Ph	н	инso ₂ Ph
6363	benzimidazolyl 7-aza-2-	1	CO(CH ₂) ₂ Ph	н	NHSO ₂ Ph
6364	benzimidazolyl 7-aza-2-	1	Bn	н	NHSO ₂ Ph
6365	benzimidazolyl 7-aza-2-	1	n-Bu	н	NHSO ₂ Ph
6366	benzimidazolyl 7-aza-2-	1	COCH ₂ (3-	н	NHSO ₂ Ph
6367	benzimidazolyl 7-aza-2-	1	indolyl) SO2-	н	NHSO ₂ Ph
	benzimidazolyl		(biphenyl)		
6368	7-aza-2- benzimidazolyl	1	CO ₂ -n-Bu	H	NHSO ₂ Ph
6369	7-aza-2- benzimidazolyl	1	CO ₂ -i-Bu	Н	NHSO ₂ Ph

6370	7-aza-2-	1	CO ₂ -t-Bu	н	NHSO2Ph
	benzimidazolyl				
6371	7-aza-2-	1	-(CH ₂) ₄ NH ₂	н	NHSO2Ph
	benzimidazolyl				
6372	7-aza-2-	1	COPh	н	NHSO2Ph
	benzimidazolyl				
6373	7-aza-2-	1	cyclopropyl-	Н	NHSO ₂ Ph
	benzimidazolyl		methyl		
6374	7-aza-2-	1	SO ₂ -n-Bu	Н	NHSO ₂ Ph
	benzimidazolyl				
6375	7-aza-2-	1	Cbz	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6376	7-aza-2-	1	SO ₂ Ph	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6377	7-aza-2-	1	$CO(CH_2)_2Ph$	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6378	7-aza-2-	1	Bn	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6379	7-aza-2-	1	n-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6380	7-aza-2-	1	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6381	7-aza-2-	1	CO ₂ -i-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6382	7-aza-2-	1	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6383	7-aza-2-	1	-(CH2)4NH2	Н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6384	7-aza-2-	1	COPh	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6385	7-aza-2-	1	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	benzimidazolyl				trimethylphenyl)
6386	7-aza-2-	1	Cbz	н	NHCbz
	benzimidazolyl				

6387	7-aza-2-	1	so ₂ Ph	Н	NHCbz
	benzimidazolyl				
6388	7-aza-2- ·	1	CO(CH ₂) ₂ Ph	н	NHCbz
	benzimidazolyl				
6389	7-aza-2-	1	Bn	н	NHCbz
	benzimidazolyl		•		
6390	7-a2a-2-	1	n-Bu	Н	NHCbz
	benzimidazolyl				
6391	7-aza-2-	1	CO2-n-Bu	н	NHCbz
	benzimidazolyl				
6392	7-aza-2-	1	CO ₂ -i-Bu	Н	NHCbz
	benzimidazolyl				
6393	7-aza-2-	1	CO ₂ -t-Bu	H	NHCbz
	benzimidazolyl				
6394	7-aza-2-	1	-(CH2)4NH2	Н	NHCbz
	benzimidazolyl				
6395	7-aza-2-	1	COPh	Н	NHCbz
	benzimidazolyl				
6396	7-aza-2-	1	SO ₂ -n-Bu	Н	NHCbz
	benzimidazolyl				
6397	tetrahydropyrimidin	1	Cbz	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
6398	tetrahydropyrimidin	1	SO ₂ Ph	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
6399	${\tt tetrahydropyrimidin}$	1	CO(CH ₂) ₂ Ph	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
6400	tetrahydropyrimidin	1	Bn	H	NHSO ₂ Ph
	-2-ylaminomethyl			•	
6401	tetrahydropyrimidin	1	n-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
6402	tetrahydropyrimidin	1	COCH ₂ (3-	н	NHSO ₂ Ph
	-2-ylaminomethyl		indolyl)		
6403	tetrahydropyrimidin	1	SO2-	Н	NHSO ₂ Ph
	-2-ylaminomethyl		(biphenyl)		

6404	tetrahydropyrimidin	1	CO2-n-Bu	н	NHSO ₂ Ph
	-2-ylaminomethyl				
6405	tetrahydropyrimidin	1	CO ₂ -i-Bu	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
6406	tetrahydropyrimidin	1	CO ₂ -t-Bu	н	NHSO2Ph
	-2-ylaminomethyl				
6407	tetrahydropyrimidin	1	-(CH2)4NH2	Н	NHSO2Ph
	-2-ylaminomethyl				
6408	tetrahydropyrimidin	1	COPh	Н	NHSO ₂ Ph
	-2-ylaminomethyl				
6409	tetrahydropyrimidin	1	cyclopropyl-	н	NHSO2Ph
	-2-ylaminomethyl		methyl		
6410	tetrahydropyrimidin	1	SO ₂ -n-Bu	H .	NHSO2Ph
	-2-ylaminomethyl				
6411	tetrahydropyrimidin	1	Cbz	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6412	tetrahydropyrimidin	1	SO ₂ Ph	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6413	tetrahydropyrimidin	1	$CO(CH_2)_2Ph$	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6414	tetrahydropyrimidin	1	Bn	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6415	tetrahydropyrimidin	1	n-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6416	tetrahydropyrimidin	1	CO ₂ -n-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6417	tetrahydropyrimidin	1	CO ₂ -i-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6418	tetrahydropyrimidin	1	CO ₂ -t-Bu	Н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6419	tetrahydropyrimidin	1	-(CH ₂) ₄ NH ₂	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)
6420	tetrahydropyrimidin	1	COPh	н	NHSO2-(2,4,6-
	-2-ylaminomethyl				trimethylphenyl)

6421	tetrahydropyrimidin	1.	SO ₂ -n-Bu	н	NHSO2-(2,4,6-
	-2-ylaminomethyl		-		trimethylphenyl)
6422	tetrahydropyrimidin	1	Cbz	Н	NHCbz
	-2-ylaminomethyl				•
6423	tetrahydropyrimidin	1	SO ₂ Ph	н	NHCbz
	-2-ylaminomethyl				
6424	tetrahydropyrimidin	1	$CO(CH_2)_2Ph$	Н	NHCbz
	-2-ylaminomethyl				
6425	tetrahydropyrimidin	1	Bn	H	NHCbz
	-2-ylaminomethyl				
6426	tetrahydropyrimidin	1	n-Bu	Н	NHCbz
	-2-ylaminomethyl				
6427	tetrahydropyrimidin	1	CO2-n-Bu	Н	NHCbz
	-2-ylaminomethyl				
6428	tetrahydropyrimidin	1	CO ₂ -i-Bu	Н	NHCbz
	-2-ylaminomethyl				
6429	tetrahydropyrimidin	1	CO ₂ -t-Bu	Н	NHCbz
	-2-ylaminomethyl				
6430	tetrahydropyrimidin	1	-(CH2)4NH2	Н	NHCbz
	-2-ylaminomethyl				
6431	tetrahydropyrimidin	1	COPh	Н	NHCbz
	-2-ylaminomethyl				
6432	tetrahydropyrimidin	1	so ₂ -n-Bu	H	NHCb2
	-2-ylaminomethyl				

CLAIMS

WHAT IS CLAIMED IS:

A compound of Formula I:

$$R^{1}-Q-W-X-Y$$

10 and pharmaceutically acceptable salt forms thereof, wherein:

Q is selected from

$$-z$$

$$A^{1-N} \quad \text{or} \quad -z$$

$$A^{1-N-} R^{10a}$$

15

A is selected from $-N(R^{10})$ -, $-C(R^{11})$ - or -O-;

 A^1 is selected from -O- or -N(R¹⁰)-;

20

25

- Z is a spiro-fused 4-7 membered ring system (including the sprio atom) containing 0-2 heteroatoms selected from O, S, or N, said ring system optionally being substituted on carbon with keto, or being substituted on carbon or nitrogen independently
- with 0-2 R^9 or R^{10} or R^{10a} ;

R1 is selected from:

$$R^{7}R^{6}N-V R^{8}-C-NR^{6}-V-$$
, $R^{8}R^{7}N-C-V-$, $R^{8}R^{7}N-C-NR^{6}-V-$;

5 B is independently selected from $-CH_2-$, -O-, $-N(R^2)-$, or -C(=O)-;

 B^1 is independently selected from $-CH_2-$ or $-N(R^3)-$;

- 10 D is $-N(R^2)-$, -O-, -S-, -C(=O)- or $-SO_2-$;
 - E-F is $-C(R^4) = C(R^5) -$, $-N = C(R^4) -$, $-C(R^4) = N -$, or $-C(R^4) \ge C(R^5) \ge -$;
- 15 J, K, L and M are independently selected from $-C(\mathbb{R}^4)$ -, $-C(\mathbb{R}^5)$ or -N-, provided that at least one of J, K, L and M is not -N-;
- R² is selected from: H, C₁-C₆ alkyl, (C₁-C₆

 alkyl)carbonyl, (C₁-C₆ alkoxy)carbonyl; (C₁-C₆

 alkyl)aminocarbonyl, C₃-C₆ alkenyl, C₃-C₇

cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl,
heteroaryl(C₁-C₆ alkyl)carbonyl,
heteroarylcarbonyl, aryl C₁-C₆ alkyl, (C₁-C₆
alkyl)carbonyl, arylcarbonyl, C₁-C₆ alkylsulfonyl,
arylsulfonyl, aryl(C₁-C₆ alkyl)sulfonyl,
heteroarylsulfonyl, heteroaryl(C₁-C₆
alkyl)sulfonyl, aryloxycarbonyl, aryl(C₁-C₆
alkoxy)carbonyl, wherein said aryl groups are
substituted with 0-2 substituents independently
selected from the group consisting of C₁-C₄ alkyl,
C₁-C₄ alkoxy, halo, CF₃, and nitro;

- R³ isselected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, or heteroaryl(C₁-C₆ alkyl)-;
- R⁴ and R⁵ are independently selected from: H, C₁-C₄ alkoxy, NR²R³, halogen, NO₂, CN, CF₃, C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, (C₁-C₆ alkyl)carbonyl, (C₁-C₆ alkoxy)carbonyl, arylcarbonyl;
- alternatively, when substituents on adjacent atoms, R⁴
 and R⁵ can be taken together with the carbon atoms
 to which they are attached to form a 5-7 membered
 carbocyclic or 5-7 membered heterocyclic aromatic
 or non-aromatic ring system, said carbocyclic or
 heterocyclic ring being optionally substituted with
 0-2 groups independently selected from: C₁-C₄
 alkyl, C₁-C₄ alkoxy, halo, cyano, amino, CF₃, or
 NO₂;

 R^6 is selected from: H, $C_1\text{-}C_4$ alkyl, or benzyl;

35

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R^7 and R^8 are independently selected from: H, C_1-C_6
            alkyl, C3-C7 cycloalkyl, C4-C11 cycloalkylalkyl,
            aryl, aryl(C_1-C_6 alkyl)-, or heteroaryl(C_0-C_6
            alkyl)-:
 5
     U
            is selected from:
            -N(R^6)(CH_2)_{n^-}
            -N(R^6)(CH_2)_mO-,
            -N(R^6)(CH_2)_mN(R^7)
            -N(R^6)(CH_2)_nS(O)_p-
10
            -N(R^6)C(=0)(CH_2)_n-;
            -N(R^6)(CH_2)_mC(=0)-;
            is selected from:
15
            -(CH_2)_{n}-,
            -(CH_2)_mO-(CH_2)_n-,
            -(CH<sub>2</sub>)<sub>m</sub>N(R<sup>7</sup>) (CH<sub>2</sub>)<sub>n</sub>-,
            -(CH_2)_nS(O)_p(CH_2)_n-,
            -(CH_2)_mN(R^7)C(=0)(CH_2)_{n^-}
            -(CH_2)_nC(=O)N(R^7)(CH_2)_n-,
20
            -(CH_2)_nC(=O)(CH_2)_n-;
      R9 is selected from H, C1-C4 alkyl, C1-C4 alkoxy, aryl,
             aryl(C_1-C_6 \ alkyl)-, (C_1-C_4 \ alkoxy) \ carbonyl, (C_1-C_4
             alkyl)carbonyl, C_1-C_4 alkylsulfonyl, or C_1-C_4
25
             alkylaminosulfonyl;
      R^{10} is selected from: H, CO_2R^{17}, C(=0)R^{17}, C(=0)NR^{17}R^{20},
             -SO_2R^{17}, -SO_2NR^{17}R^{20}, C_1-C_6 alkyl substituted with 0-
             1 R^{15}, C_3-C_6 alkenyl substituted with 0-1 R^{15}, C_3-C_7
30
             cycloalkyl substituted with 0-1 \ensuremath{\text{R}^{15}},\ \ensuremath{\text{C}_4\text{--}\text{C}_{11}}
             cycloalkylalkyl substituted with 0-1 R^{15}, aryl
             substituted with 0-1 R^{15} or 0-2 R^{11}, or ary1(C_1-C_6
             alkyl)- substituted with 0-1 R^{15} or 0-2 R^{11};
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35

 R^{10a} is selected from: CO_2R^{17} , $C(=0)R^{17}$, $C(=0)NR^{17}R^{20}$, $-SO_2R^{17}$, $-SO_2NR^{17}R^{20}$, C_1-C_6 alkyl substituted with 0-1 R^{15} , C_3-C_6 alkenyl substituted with 0-1 R^{15} , C_3-C_7 cycloalkyl substituted with 0-1 R^{15} , C_4-C_{11} cycloalkylalkyl substituted with 0-1 R^{15} , aryl substituted with 0-1 R^{15} or 0-2 R^{11} , or aryl(C_1-C_6 alkyl)- substituted with 0-1 R^{15} or 0-2 R^{11} ;

R¹¹ is selected from H, C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl,

aryl(C₁-C₆ alkyl)-, (C₁-C₄ alkoxy)carbonyl, (C₁-C₄

alkyl)carbonyl, C₁-C₄ alkylsulfonyl, or C₁-C₄

alkylaminosulfonyl;

W is selected from:

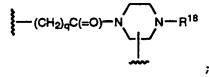
15 C_1-C_4 alkylene, $-(C(R^{12})_2)_qO(C(R^{12})_2)_q^-,$ $-(C(R^{12})_2)_qC(=0)(C(R^{12})_2)_q^-,$ $-(C(R^{12})_2)_qC(=0)N(R^{13})_-,$ $-C(=0)-N(R^{13})_-(C(R^{12})_2)_q^-;$

20

5

X is $-(C(R^{12})_2)_{\sigma}C(R^{12})(R^{14}) - C(R^{12})(R^{15}) -;$

alternatively, W and X can be taken together to be



25

 R^{12} is selected from H, C_1 - C_6 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_7 cycloalkyl, C_4 - C_{10} cycloalkylalkyl, $(C_1$ - C_4 alkyl)carbonyl, aryl, or aryl $(C_1$ - C_6 alkyl)-;

30 R¹³ is selected from H, C₁-C₆ alkyl, C₃-C₇ cycloalkylmethyl, or aryl(C₁-C₆ alkyl)-

R14 is selected from:

H, C₁-C₆ alkylthio(C₁-C₆ alkyl)-, aryl(C₁-C₁₀ alkylthioalkyl)-, aryl(C₁-C₁₀ alkoxyalkyl)-, C₁-C₁₀ alkyl, C₁-C₁₀ alkoxyalkyl, C₁-C₆ hydroxyalkyl, C₂-C₁₀ alkenyl, C₂-C₁₀ alkynyl, C₃-C₁₀ cycloalkyl, C₃-C₁₀ cycloalkylalkyl, aryl(C₁-C₆ alkyl)-, heteroaryl(C₁-C₆ alkyl)-, aryl, heteroaryl, CO₂R¹⁷, C(=0)R¹⁷, or CONR¹⁷R²⁰, provided that any of the above alkyl, cycloalkyl, aryl or heteroaryl groups may optionally be substituted independently with 0-1 R¹⁶ or 0-2 R¹¹;

R¹⁵ is selected from:

H, R¹⁶, C₁-C₁₀ alkyl, C₁-C₁₀ alkoxyalkyl,

C₁-C₁₀ alkylaminoalkyl, C₁-C₁₀ dialkylaminoalkyl,

(C₁-C₁₀ alkyl)carbonyl, aryl(C₀-C₆ alkyl)carbonyl,

C₁-C₁₀ alkenyl, C₁-C₁₀ alkynyl, C₃-C₁₀ cycloalkyl,

C₃-C₁₀ cycloalkylalkyl, aryl(C₁-C₆ alkyl)-,

heteroaryl(C₁-C₆ alkyl)-, aryl, heteroaryl, CO₂R¹⁷,

C(=0)R¹⁷, CONR¹⁷R²⁰, SO₂R¹⁷, or SO₂NR¹⁷R²⁰, provided

that any of the above alkyl, cycloalkyl, aryl or

heteroaryl groups may optionally be substituted

independently with 0-2 R¹¹;

Y is selected from:

25 -COR¹⁹, -SO₃H, -PO₃H, tetrazolyl, -CONHNHSO₂CF₃, -CONHSO₂R¹⁷, -CONHSO₂NHR¹⁷, -NHCOCF₃, -NHCONHSO₂R¹⁷, -NHSO₂R¹⁷, -OPO₃H₂, -OSO₃H, -PO₃H₂, -SO₃H, -SO₂NHCOR¹⁷, -SO₂NHCO₂R¹⁷,

 R^{16} is selected from: -N(R^{20})-C(=0)-O- R^{17} ,

30

```
-N(R^{20})-C(=0)-R^{17},
                -N(R^{20})-C(=0)-NH-R^{17},
                -N(R^{20})SO_2-R^{17}, or
                -N(R^{20})SO_2-NR^{20}R^{17};
  5
        R<sup>17</sup> is selected from:
                C_1-C_{10} alkyl, C_3-C_{11} cycloalkyl, aryl(C_1-C_6 alkyl)-,
                 (C_1-C_6 \text{ alkyl}) aryl, heteroaryl (C_1-C_6 \text{ alkyl})-, (C_1-C_6 \text{ alkyl})-
                alkyl)heteroaryl, arylaryl(C1-C6 alkyl)-,
10
                heteroarylaryl(C1-C6 alkyl)-, arylheteroaryl(C1-C6
                alkyl)-, heteroarylheteroaryl(C_1-C_6 alkyl)-,
                heteroaryl, or aryl, wherein said aryl or
                heteroaryl groups are optionally substituted with
                0-3 substituents independently selected from the
15
                group consisting of: C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy,
                aryl, halo, cyano, amino, CF3, and NO2;
        R<sup>18</sup> is selected from:
                H.
                -C(=0)-O-R^{17},
20
                -C(=0)-R^{17}
                -C(=0)-NH-R^{17}
                -SO_2-R^{17}, or
                -SO_2-NR^{20}R^{17};
25
       R<sup>19</sup> is selected from:
                hydroxy,
                C_1-C_{10} alkyloxy,
                C_3-C_{11} cycloalkyloxy,
                aryloxy,
30
                aryl(C_1-C_6 \ alkoxy)-,
                C_3-C_{10} alkylcarbonyloxyalkyloxy,
                C_3-C_{10} alkoxycarbonyloxyalkyloxy,
                C2-C10 alkoxycarbonylalkyloxy,
35
                C5-C10 cycloalkylcarbonyloxyalkyloxy,
                C5-C10 cycloalkoxycarbonyloxyalkyloxy,
```

C5-C10 cycloalkoxycarbonylalkyloxy, C_7 - C_{11} aryloxycarbonylalkyloxy, C_8-C_{12} aryloxycarbonyloxyalkyloxy, C₈-C₁₂ arylcarbonyloxyalkyloxy, 5 C₅-C₁₀ alkoxyalkylcarbonyloxyalkyloxy, C₅-C₁₀ (5-alkyl-1,3-dioxa-cyclopenten-2-oneyl) methyloxy, C₁₀-C₁₄ (5-aryl-1,3-dioxa-cyclopenten-2-oneyl)methyloxy, or $(R^{11})(R^{12})N-(C_1-C_{10} \text{ alkoxy})-;$ 10 R²⁰ is selected from: H, C1-C6 alkyl, C3-C7 cycloalkyl, C_4-C_{11} cycloalkylalkyl, aryl, aryl(C_1-C_6 alkyl)-, or heteroaryl(C₁-C₆ alkyl)-; 15 is 1-2; m is 0-2; is 0-2; q is 0-2; and q 20 is 0-2;

provided that:

n, q, and r are chosen such that the number of in-chain atoms between \mathbb{R}^1 and Y is in the range of 8-18.

25

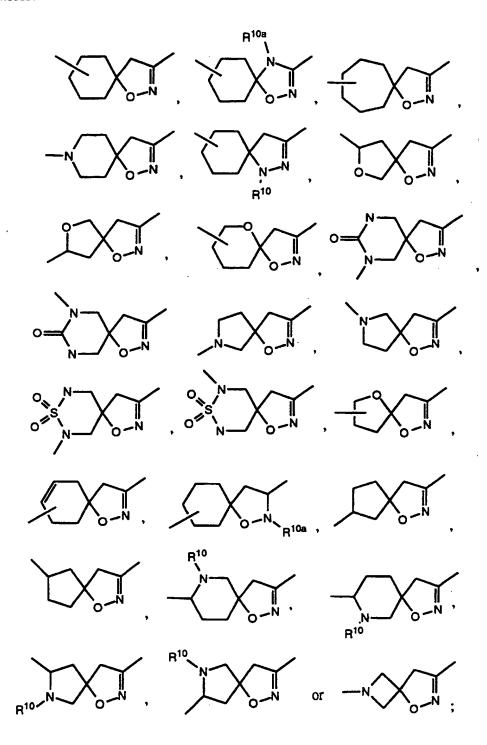
30

2. A compound of Claim 1 of the Formula I:

 $R^1-Q-W-X-Y$

and pharmaceutically acceptable salt forms thereof wherein:

35 Q is selected from:



R1 is selected from:.

5 D is $-N(R^2)$ -, -O-, -S-, -C(=O)- or $-SO_2$ -;

E-F is
$$-C(R^4) = C(R^5) -$$
, $-N = C(R^4) -$, $-C(R^4) = N -$, or $-C(R^4) \ge C(R^5) \ge -$;

- J, K, L and M are independently selected from $-C(\mathbb{R}^4)$ -, 10 $-C(R^5)$ - or -N-, provided that at least one of J, K, L and M is not -N-;
- R^2 is selected from: H, C_1 - C_6 alkyl, $(C_1$ - C_6 alkyl)carbonyl, (C1-C6 alkoxy)carbonyl; (C1-C6 15 alkyl)aminocarbonyl, C3-C6 alkenyl, C3-C7 cycloalkyl, C4-C11 cycloalkylalkyl, aryl, heteroaryl(C1-C6 alkyl)carbonyl, heteroarylcarbonyl, aryl(C1-C6 alkyl)-, (C1-C6 alkyl)carbonyl, arylcarbonyl, C1-C6 alkylsulfonyl, 20

arylsulfonyl, aryl(C₁-C₆ alkyl)sulfonyl,

heteroarylsulfonyl, heteroaryl(C_1 - C_6 alkyl)sulfonyl, aryloxycarbonyl, or aryl(C_1 - C_6 alkoxy)carbonyl, wherein said aryl groups are substituted with 0-2 substituents independently selected from the group consisting of C_1 - C_4 alkyl, C_1 - C_4 alkoxy, halo, CF_3 , and nitro;

- R³ is selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, C_4 -C₁₁ cycloalkylalkyl, aryl, aryl(C_1 -C₆ alkyl)-, or heteroaryl(C_1 -C₆ alkyl)-;
- R⁴ and R⁵ are independently selected from: H, C₁-C₄ alkoxy, NR²R³, halogen, NO₂, CN, CF₃, C₁-C₆ alkyl, C₃-C₆ alkenyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, (C₁-C₆ alkyl)carbonyl, (C₁-C₆ alkoxy)carbonyl, arylcarbonyl, or
- alternatively, when substituents on adjacent atoms, R⁴

 and R⁵ can be taken together with the carbon atoms
 to which they are attached to form a 5-7 membered
 carbocyclic or 5-7 membered heterocyclic aromatic
 or non-aromatic ring system, said carbocyclic or
 heterocyclic ring being optionally substituted with
 0-2 groups independently selected from: C₁-C₄
 alkyl, C₁-C₄ alkoxy, halo, cyano, amino, CF₃, or
 NO₂;

 R^6 is selected from: H, C_1 - C_4 alkyl, or benzyl;

R⁷ and R⁸ are independently selected from: H, C₁-C₆ alkyl, C₃-C₇ cycloalkyl, C₄-C₁₁ cycloalkylalkyl, aryl, aryl(C₁-C₆ alkyl)-, or heteroaryl(C₀-C₆ alkyl)-;

U is selected from:

35

5

```
-N(R^6)(CH_2)_{n}-,
              -N(R^6)(CH_2)_mO-,
              -N(R^6)(CH_2)_mN(R^7)-
              -N(R^6)(CH_2)_nS(O)_p-
 5
              -N(R^6)C(=0)(CH_2)_{n}^-;
      V
              is selected from:
              -(CH_2)_{n}-
              -(CH_2)_mO-(CH_2)_n-,
10
              -(CH_2)_mN(R^7)(CH_2)_n-,
              -(CH_2)_nS(O)_p(CH_2)_n-,
              -(CH_2)_mN(R^7)C(=0)(CH_2)_{n^-}
              -(CH<sub>2</sub>)<sub>n</sub>C(=O)N(R<sup>7</sup>)(CH<sub>2</sub>)<sub>n</sub>-,
              -(CH_2)_nC(=0)(CH_2)_n-;
15
      R^9 is selected from H, C_1-C_4 alkyl, C_1-C_4 alkoxy, aryl,
              aryl(C_1-C_6 \ alkyl)-, (C_1-C_4 \ alkoxy) carbonyl, (C_1-C_4
              alkyl)carbonyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, or C<sub>1</sub>-C<sub>4</sub>
              alkylaminosulfonyl;
20
      R^{10} is selected from: H, CO_2R^{17}, C(=0)R^{17}, C(=0)NR^{17}R^{20},
              -SO_2R^{17}, -SO_2NR^{17}R^{20}, C_1-C_6 alkyl substituted with 0-
              1 R<sup>15</sup>, C<sub>3</sub>-C<sub>6</sub> alkenyl substituted with 0-1 R<sup>15</sup>, C<sub>3</sub>-C<sub>7</sub>
              cycloalkyl substituted with 0-1 R<sup>15</sup>, C<sub>4</sub>-C<sub>11</sub>
              cycloalkylalkyl substituted with 0-1 R<sup>15</sup>, aryl
25
              substituted with 0-1 R^{15} or 0-2 R^{11}, or aryl(C<sub>1</sub>-C<sub>6</sub>
              alkyl) - substituted with 0-1 R<sup>15</sup> or 0-2 R<sup>11</sup>;
      R^{10a} is selected from: CO_2R^{17}, C(=0)R^{17}, C(=0)NR^{17}R^{20},
30
              -SO_2R^{17}, -SO_2NR^{17}R^{20}, C_1-C_6 alkyl substituted with 0-
              1 R^{15}, C_3-C_6 alkenyl substituted with 0-1 R^{15}, C_3-C_7
              cycloalkyl substituted with 0-1 R<sup>15</sup>, C<sub>4</sub>-C<sub>11</sub>
              cycloalkylalkyl substituted with 0-1 R15, aryl
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substituted with 0-1 R^{15} or 0-2 R^{11} , or aryl(C₁-C₆

alkyl) - substituted with 0-1 R15 or 0-2 R11;

35

PCT/US97/04567 WO 97/33887

 R^{11} is selected from H, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, aryl, $aryl(C_1-C_6 \ alkyl)-, (C_1-C_4 \ alkoxy) \ carbonyl, (C_1-C_4)$ alkyl)carbonyl, C1-C4 alkylsulfonyl, or C1-C4 alkylaminosulfonyl;

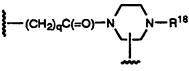
5

10

is selected from: C_1-C_4 alkylene, $-(C(R^{12})_2)_qO(C(R^{12})_2)_q-$, $-(C(R^{12})_2)_qC(=0)(C(R^{12})_2)_q -(C(R^{12})_2)_qC(=0)N(R^{13})_{-}$ $-C(=0)-N(R^{13})-(C(R^{12})_2)_{q}$;

is $-(C(R^{12})_2)_{\sigma}C(R^{12})(R^{14})-C(R^{12})(R^{15})-;$ X

alternatively, W and X can be taken together to be 15



is selected from H, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C3-C7 cycloalkyl, 20 C_4-C_{10} cycloalkylalkyl, $(C_1-C_4$ alkyl)carbonyl, aryl, or aryl(C₁-C₆ alkyl)-;

is selected from H, C1-C6 alkyl, C3-C7 R13 cycloalkylmethyl, or aryl(C1-C6 alkyl)-;

25

30

R¹⁴ is selected from:

H, C_1 - C_6 alkylthio(C_1 - C_6 alkyl)-, aryl(C_1 - C_{10} alkylthioalkyl)-, aryl(C_1 - C_{10} alkoxyalkyl)-, C_1 - C_{10} alkyl, C₁-C₁₀ alkoxyalkyl, C₁-C₆ hydroxyalkyl, C_2 - C_{10} alkenyl, C_2 - C_{10} alkynyl, C_3 - C_{10} cycloalkyl, C3-C10 cycloalkylalkyl, aryl(C1-C6 alkyl)-, heteroaryl(C_1 - C_6 alkyl)-, aryl, heteroaryl, CO_2R^{17} ,

 $C(=0)R^{17}$, or $CONR^{17}R^{20}$, provided that any of the

above alkyl, cycloalkyl, aryl or heteroaryl groups may optionally be substituted independently with 0-1 R^{16} or 0-2 R^{11} ;

5 R¹⁵ is selected from:

10

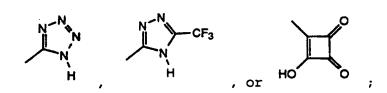
15

20

H, R^{16} , C_1 - C_{10} alkyl, C_1 - C_{10} alkoxyalkyl, C_1 - C_{10} alkylaminoalkyl, C_1 - C_{10} alkylaminoalkyl, $(C_1$ - C_{10} alkyl)carbonyl, aryl(C_0 - C_6 alkyl)carbonyl, C_1 - C_{10} alkenyl, C_1 - C_{10} alkynyl, C_3 - C_{10} cycloalkylalkyl, aryl(C_1 - C_6 alkyl)-, heteroaryl(C_1 - C_6 alkyl)-, aryl, heteroaryl, C_2 R¹⁷, C(=0)R¹⁷, C0NR¹⁷R²⁰, C0R¹⁷, or C1, or C2NR¹⁷R²⁰, provided that any of the above alkyl, cycloalkyl, aryl or heteroaryl groups may optionally be substituted independently with 0-2 R¹¹;

Y is selected from:

-COR¹⁹, -SO₃H, -PO₃H, tetrazolyl, -CONHNHSO₂CF₃, -CONHSO₂R¹⁷, -CONHSO₂NHR¹⁷, -NHCOCF₃, -NHCONHSO₂R¹⁷, -NHSO₂R¹⁷, -OPO₃H₂, -OSO₃H, -PO₃H₂, -SO₃H, -SO₂NHCOR¹⁷, -SO₂NHCO₂R¹⁷,



25 R^{16} is selected from:

 $-N(R^{20})-C(=0)-O-R^{17}$

 $-N(R^{20})-C(=0)-R^{17}$,

 $-N(R^{20})-C(=0)-NH-R^{17}$,

 $-N(R^{20})SO_2-R^{17}$, or

30 $-N(R^{20})SO_2-NR^{20}R^{17}$;

R¹⁷ is selected from:

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WO 97/33887

35

```
C_1-C_{10} alkyl, C_3-C_{11} cycloalkyl, aryl(C_1-C_6 alkyl)-,
                  (C_1-C_6 \text{ alkyl}) aryl, heteroaryl(C_1-C_6 \text{ alkyl})-, (C_1-C_6 \text{ alkyl})-
                  alkyl)heteroaryl, arylaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-,
                  heteroarylaryl(C1-C6 alkyl)-, arylheteroaryl(C1-C6
 5
                  alkyl)-, heteroarylheteroaryl(C_1-C_6 alkyl)-,
                  heteroaryl, or aryl, wherein said aryl or
                  heteroaryl groups are optionally substituted with
                  0-3 substituents independently selected from the
                  group consisting of: C1-C4 alkyl, C1-C4 alkoxy,
10
                  aryl, halo, cyano, amino, CF3, and NO2;
        R<sup>18</sup> is selected from:
                  Η,
                  -C(=0)-O-R^{17},
                  -C(=0)-R^{17}
15
                  -C(=0)-NH-R^{17}
                  -SO_2-R^{17}, or
                  -SO_2-NR^{20}R^{17};
20
        R<sup>19</sup>
                  is selected from:
                  hydroxy,
                  C_1-C_{10} alkyloxy,
                  C_3-C_{11} cycloalkyloxy,
                  aryloxy,
25
                  aryl(C_1-C_6 \ alkoxy)-,
                  C<sub>3</sub>-C<sub>10</sub> alkylcarbonyloxyalkyloxy,
                  C_3-C_{10} alkoxycarbonyloxyalkyloxy,
                  C_2-C_{10} alkoxycarbonylalkyloxy,
                  C5-C10 cycloalkylcarbonyloxyalkyloxy,
30
                  C5-C10 cycloalkoxycarbonyloxyalkyloxy,
                  C5-C10 cycloalkoxycarbonylalkyloxy,
                  C_7-C_{11} aryloxycarbonylalkyloxy,
                  C<sub>8</sub>-C<sub>12</sub> aryloxycarbonyloxyalkyloxy,
                  C8-C12 arylcarbonyloxyalkyloxy,
```

C5-C10 alkoxyalkylcarbonyloxyalkyloxy,

```
C<sub>5</sub>-C<sub>10</sub> (5-alkyl-1,3-dioxa-cyclopenten-2-one-
             yl)methyloxy,
             C<sub>10</sub>-C<sub>14</sub> (5-aryl-1,3-dioxa-cyclopenten-2-one-
             yl)methyloxy, or
 5
              (R^{11})(R^{12})N-(C_1-C_{10} \text{ alkoxy})-;
      R^{20} selected from: H, C_1-C_6 alkyl, C_3-C_7 cycloalkyl, C_4-
             C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, or
             heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;
10
             is 1-2;
      n
             is 0-2;
             is 0-2;
             is 0-2; and
      q
15
             is 0-2;
```

provided that:

20

25

n, q, and r are chosen such that the number of inchain atoms between R^1 and Y is in the range of 8-18.

- 3. A compound of Claim 1 of the Formula I and pharmaceutically acceptable salt forms thereof wherein:
- Q is selected from:

 \mathbb{R}^1 is selected from:

wherein the above heterocycles are optionally substituted with 0-2 substituents selected from the group consisting of: NH₂, halogen, NO₂, CN, CF₃, C₁-C₄ alkoxy, C₁-C₆ alkyl, and C₃-C₇ cycloalkyl;

R² is selected from: H, C₁-C₄ alkyl or benzyl;

U is $-NH(CH_2)_{n-}$;

10

V is $-(CH_2)_{n}$ -;

R¹⁰ is selected from: H, CO_2R^{17} , $C(=0)R^{17}$, $CONR^{17}R^{20}$, $-SO_2R^{17}$, $-SO_2NR^{17}R^{20}$, C_1 -C₆ alkyl substituted with 0-1 R¹⁵, C₃-C₇ cycloalkyl substituted with 0-1 R¹⁵, C₄-C₁₁ cycloalkylalkyl substituted with 0-1 R¹⁵, aryl substituted with 0-1 R¹⁵ or 0-2 R¹¹, or aryl(C₁-C₆ alkyl)- substituted with 0-1 R¹⁵ or 0-2 R¹¹;

20

25

- R^{10a} is selected from: CO_2R^{17} , $C(=O)R^{17}$, $CONR^{17}R^{20}$, $-SO_2R^{17}$, $-SO_2NR^{17}R^{20}$, C_1 - C_6 alkyl substituted with 0-1 R^{15} , C_3 - C_6 alkenyl substituted with 0-1 R^{15} , C_3 - C_7 cycloalkyl substituted with 0-1 R^{15} , C_4 - C_{11} cycloalkylalkyl substituted with 0-1 R^{15} , aryl substituted with 0-1 R^{15} or 0-2 R^{11} , or aryl(C_1 - C_6 alkyl)- substituted with 0-1 R^{15} or 0-2 R^{11} ;
- R¹¹ is selected from H, C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl,

 aryl(C₁-C₆ alkyl)-, (C₁-C₄ alkoxy)carbonyl, (C₁-C₄

 alkyl)carbonyl, C₁-C₄ alkylsulfonyl, or C₁-C₄

 alkylaminosulfonyl;

W is $-C(=0)-N(R^{13})-;$

35

X is $-CH(R^{14})-CH(R^{15})-;$

 R^{13} is H or CH_3 ;

R¹⁴ is selected from:

H, C₁-C₁₀ alkyl, aryl, or heteroaryl, wherein said aryl or heteroaryl groups are optionally substituted with 0-3 substituents independently selected from the group consisting of: C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl, halo, cyano, amino, CF₃, and NO₂;

 R^{15} is H or R^{16} ;

Y is $-C(=0)R^{19}$;

15

R¹⁶ is selected from:

 $-N(R^{20})-C(=0)-O-R^{17}$

 $-N(R^{20})-C(=0)-R^{17}$,

 $-N(R^{20})-C(=0)-NH-R^{17}$,

20 $-N(R^{20})SO_2-R^{17}$, or

 $-N(R^{20})SO_2-N(R^{20})R^{17};$

R¹⁷ is selected from:

C₁-C₁₀ alkyl, C₃-C₁₁ cycloalkyl, aryl(C₁-C₆ alkyl)-,

(C₁-C₆ alkyl)aryl, heteroaryl(C₁-C₆ alkyl)-, (C₁-C₆

alkyl)heteroaryl, arylaryl(C₁-C₆ alkyl)-,

heteroarylaryl(C₁-C₆ alkyl)-, arylheteroaryl(C₁-C₆

alkyl)-, heteroarylheteroaryl(C₁-C₆ alkyl)-,

heteroaryl, or aryl, wherein said aryl or

heteroaryl groups are optionally substituted with

0-3 substituents independently selected from the

group consisting of: C₁-C₄ alkyl, C₁-C₄ alkoxy,

aryl, halo, cyano, amino, CF₃, and NO₂;

35 R¹⁹ is selected from: hydroxy,

```
C_1-C_{10} alkoxy,
          methylcarbonyloxymethoxy-,
          ethylcarbonyloxymethoxy-,
          t-butylcarbonyloxymethoxy-,
 5
          cyclohexylcarbonyloxymethoxy-,
          1-(methylcarbonyloxy)ethoxy-,
          1-(ethylcarbonyloxy)ethoxy-,
          1-(t-butylcarbonyloxy)ethoxy-,
          1-(cyclohexylcarbonyloxy)ethoxy-,
10
          i-propyloxycarbonyloxymethoxy-,
          t-butyloxycarbonyloxymethoxy-,
          1-(i-propyloxycarbonyloxy)ethoxy-,
          1-(cyclohexyloxycarbonyloxy) ethoxy-,
          1-(t-butyloxycarbonyloxy)ethoxy-,
15
          dimethylaminoethoxy-,
          diethylaminoethoxy-,
          (5-methyl-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,
          (5-(t-butyl)-1,3-dioxacyclopenten-2-on-4-
          yl) methoxy-,
20
          (1,3-dioxa-5-phenyl-cyclopenten-2-on-4-yl)methoxy-,
          1-(2-(2-methoxypropyl)carbonyloxy)ethoxy-;
    R<sup>20</sup> is H or CH<sub>3</sub>; and
25
    n
          is 0-1.
```

4. A compound of Claim 1 of the Formula I and30 pharmaceutically acceptable salt forms thereof wherein:

Q is selected from:

R¹ is selected from:

 R^2 is selected from: H, $C_1\text{-}C_4$ alkyl, or benzyl;

5

U is $-NH(CH_2)_n-$;

V is $-(CH_2)_{n^-}$;

10 R¹⁰ is selected from: H, CO_2R^{17} , $C(=0)R^{17}$, $C(=0)R^{17}R^{20}$, $-SO_2R^{17}$, $-SO_2NR^{17}R^{20}$, C_1-C_6 alkyl substituted with 0-1 R¹⁵, C_3-C_6 alkenyl substituted with 0-1 R¹⁵, C_4-C_{11} cycloalkyl substituted with 0-1 R¹⁵, aryl

substituted with 0-1 R^{15} or 0-2 R^{11} , or aryl(C₁-C₆ alkyl)- substituted with 0-1 R^{15} or 0-2 R^{11} ;

R^{10a} is selected from: CO_2R^{17} , $C(=O)R^{17}$, $CONR^{17}R^{20}$,

- SO_2R^{17} , - $SO_2NR^{17}R^{20}$, C_1 - C_6 alkyl substituted with 0-1 R¹⁵, C_3 - C_7 cycloalkyl substituted with 0-1 R¹⁵, C_4 - C_{11} cycloalkylalkyl substituted with 0-1 R¹⁵, aryl substituted with 0-1 R¹⁵ or 0-2 R¹¹, or aryl (C_1 - C_6 alkyl)- substituted with 0-1 R¹⁵ or 0-2 R¹¹;

R¹¹ is selected from H, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, aryl, aryl(C_1 - C_6 alkyl)-, (C_1 - C_4 alkoxy)carbonyl, (C_1 - C_4 alkyl)carbonyl, C_1 - C_4 alkylsulfonyl, or C_1 - C_4 alkylaminosulfonyl;

W is $-C(=0)-N(R^{13})-;$

X is $-CH(R^{14})-CH(R^{15})-;$

20

15

 R^{13} is H or CH_3 ;

R¹⁴ is selected from:

H, C₁-C₁₀ alkyl, aryl, or heteroaryl, wherein said aryl or heteroaryl groups are optionally substituted with 0-3 substituents independently selected from the group consisting of: C₁-C₄ alkyl, C₁-C₄ alkoxy, aryl, halo, cyano, amino, CF₃, and NO₂;

30

 R^{15} is H or R^{16} ;

Y is $-C(=0)R^{19}$;

35 R^{16} is selected from: -N(R^{20})-C(=0)-O- R^{17} ,

35

```
-N(R^{20})-C(=0)-R^{17},
                -N(R^{20})SO_2-R^{17},
        R<sup>17</sup> is selected from:
                C_1-C_{10} alkyl, C_3-C_{11} cycloalkyl, aryl(C_1-C_6 alkyl)-,
 5
                 (C_1-C_6 \text{ alkyl}) aryl, heteroaryl(C_1-C_6 \text{ alkyl})-, (C_1-C_6 \text{ alkyl})-
                alkyl)heteroaryl, arylaryl(C1-C6 alkyl)-,
                heteroarylaryl(C1-C6 alkyl)-, arylheteroaryl(C1-C6
                alkyl)-, heteroarylheteroaryl(C_1-C_6 alkyl)-,
                heteroaryl, or aryl, wherein said aryl or
10
                heteroaryl groups are optionally substituted with
                 0-3 substituents independently selected from the
                group consisting of: C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy,
                 aryl, halo, cyano, amino, CF3, and NO2;
15
        R19
                is selected from:
                hydroxy,
                C_1-C_{10} alkoxy,
                methylcarbonyloxymethoxy-,
                 ethylcarbonyloxymethoxy-,
20
                 t-butylcarbonyloxymethoxy-,
                cyclohexylcarbonyloxymethoxy-,
                 1-(methylcarbonyloxy)ethoxy-,
                 1-(ethylcarbonyloxy)ethoxy-,
                 1-(t-butylcarbonyloxy)ethoxy-,
25
                 1-(cyclohexylcarbonyloxy)ethoxy-,
                 i-propyloxycarbonyloxymethoxy-,
                 t-butyloxycarbonyloxymethoxy-,
                 1-(i-propyloxycarbonyloxy)ethoxy-,
30
                 1-(cyclohexyloxycarbonyloxy)ethoxy-,
                 1-(t-butyloxycarbonyloxy)ethoxy-,
                 dimethylaminoethoxy-,
                 diethylaminoethoxy-,
```

(5-methyl-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,

(5-(t-butyl)-1,3-dioxacyclopenten-2-on-4-

yl)methoxy-,

```
(1,3-dioxa-5-phenyl-cyclopenten-2-on-4-yl) methoxy-,
          1-(2-(2-methoxypropyl)carbonyloxy)ethoxy-;
    R<sup>20</sup> is H or CH<sub>3</sub>; and
          is 0-1.
    n
10
              A compound of Claim 1 and enantiomeric or
     diasteriomeric forms thereof, or mixtures of
     enantiomeric or diastereomeric forms thereof, and
    pharmaceutically acceptable salt forms thereof, selected
     from the group consisting of:
15
          (S)-2-phenylsulfonylamino-3-[[[8-(2-
               pyridinylaminomethyl)-]-1-oxa-2-azaspiro-
               [4,5]-dec-2-en-3-yl]carbonylamino]propionic
               acid,
20
          (S)-2-benzyloxycarbonylamino-3-[[[8-(2-
               pyridinylaminomethyl)-]-1-oxa-2-azaspiro-
               [4,5]-dec-2-en-3-yl]carbonylamino]propionic
               acid.
          (S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-
25
               [[[8-(2-pyridinylaminomethyl)-]-1-oxa-2-
               azaspiro-[4,5]-dec-2-en-3-
               vl]carbonylamino]propionic acid,
          (S)-2-[(3,5-dimethylisoxazol4-yl)sulfonyl]amino-3-
                [[[8-(2-pyridinylaminomethyl)-]-1-oxa-2-
               azaspiro-[4,5]-dec-2-en-3-
30
               yl]carbonylamino)propionic acid,
          (S)-2-phenylsulfonylamino-3-[[[8-[(6-aminopyridin-
               2-y1)methy1]-]-1-oxa-2,8-diazaspiro-[4,5]-dec-
               2-en-3-y1]carbonylamino]propionic acid,
```

	(S)-2-phenylsulfonylamino-3-[[[8-[(6-aminopyridin
	2-y1)methy1]]-1-oxa-2,8-diazaspiro-[4,4]-non
	2-en-3-y1]carbonylamino]propionic acid,
	(S)-2-phenylsulfonylamino-3-[[[8-(2-
5	pyridinylaminomethyl)-]-1-oxa-2-azaspiro-
	[4,4]-non-2-en-3-yl]carbonylamino]propionic acid,
	(S)-2-phenylsulfonylamino-3-[[[8-[2-(4,5-
	dihydroimidazol-2-yl)aminomethyl]-]-1-oxa-2-
10	<pre>azaspiro-[4,5]-dec-2-en-3-yl]carbonylamino]- propionic acid,</pre>
	(S)-2-[(2-methylphenyl)sulfonyl]amino-3-[[[8-(2-
	pyridinylaminomethyl)-]-1-oxa-2-azaspiro-
15	[4,5]-dec-2-en-3-yl]carbonylamino]propionic acid,
	(S)-2-[(2-chloro-4-methylphenyl)sulfonyl]amino-3-
	[[[8-(2-pyridinylaminomethyl)-]-1-oxa-2-
	azaspiro-[4,5]-dec-2-en-3-
	yl]carbonylamino]propionic acid,
20	(S)-2-[(4-biphenyl)sulfonyl]amino-3-[[[8-(2-
	pyridinylaminomethyl)-]-1-oxa-2-azaspiro-
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic acid,
	(S)-2-[(2-bromophenyl)sulfonyl]amino-3-[[[8-(2-
25	<pre>pyridinylaminomethyl)-]-1-oxa-2-azaspiro-</pre>
	<pre>{4,5}-dec-2-en-3-yl}carbonylamino]propionic acid,</pre>
	(S)-2-[(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-
	<pre>pyridinylaminomethyl)-]-l-oxa-2-azaspiro-</pre>
30	<pre>[4,5]-dec-2-en-3-yl]carbonylamino]propionic acid,</pre>
	(S)-2-[(1-naphthyl)sulfonyl]amino-3-[[[8-(2-
	pyridinylaminomethyl)-]-1-oxa-2-azaspiro-
35	[4,5]-dec-2-en-3-yl]carbonylamino]propionic acid.

	(S)-2-phenylsulfonylamino-3-[[[8-(2-
	<pre>imidazolylaminomethyl)-]-1-oxa-2-azaspiro-</pre>
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,
5 .	(S)-2-benzyloxycarbonylamino-3-[[[8-(2-
	<pre>imidazolylaminomethyl)-]-1-oxa-2-azaspiro-</pre>
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic acid,
	(S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-
10	[[[8-(2-imidazolylaminomethyl)-]-1-oxa-2-
	azaspiro-[4,5]-dec-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[8-
	(2-imidazolylaminomethyl)-]-1-oxa-2-azaspiro
15	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[[8-
	(2-imidazolylaminomethyl)-]-1-oxa-2-azaspiro
	[4,5]-dec-2-en-3-yl]carbonylamino)propionic
20	acid,
	(S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino
	3-[[[8-(2-imidazolylaminomethyl)-]-1-oxa-2-
	azaspiro-[4,5]-dec-2-en-3-
	yl]carbonylamino]propionic acid,
25	(S)-2-[(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)su
	<pre>imidazolylaminomethyl)-]-1-oxa-2-azaspiro-</pre>
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-[biphenylsulfonyl]amino-3-[[[8-(2-
30	<pre>imidazolylaminomethyl)-]-1-oxa-2-azaspiro-</pre>
	[4,5]-dec-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-phenylsulfonylamino-3-[[7-benzyloxycarbonyl
	8-(2-imidazolylaminomethyl)-1-oxa-2,7-
35	diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,

	(S)-2-benzyloxycarbonylamino-3-[[7-
	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
5	(S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[7-
10	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)
15	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino-
	3-[[7-benzyloxycarbonyl-8-(2-
	imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-
20	[4,4]-non-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-[(2-naphthyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
25	yl]carbonylamino]propionic acid,
	(S)-2-[biphenylsulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-imidazolylaminomethyl)
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
30	(S)-2-phenylsulfonylamino-3-[[8-(2-
	imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-
	[4,4]-non-2-en-3-yl]carbonylamino]propionic
	acid,
	(S)-2-benzyloxycarbonylamino-3-[[8-(2-
35	imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-

[4,4]-non-2-en-3-yl]carbonylamino]propionic acid, (S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[8-(2-imidazolylaminomethyl)-1-oxa-2.7-5 diazaspiro-[4,4]-non-2-en-3yl]carbonylamino]propionic acid, (S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[8-(2-interval)sulfonyl]]amino-3-[8-(2-interval)sulfonyl]]amino-3-[8-(2-interval)sulfonyl]]amino-3-[8-(2-interval)sulfonyl]]amino-3-[8-(2-interval)sulfonyl]]amino-3-[8-(2-interval)sulfonyl]]amino-3-[8-(2-interval)sulfonyl]]amino-3-[8-(2-interval)sulfonyl]amino-3-[8-(2-interval)sulfonyl]amino-3-[8-(2-interval)sulfonyl]amino-3-[8-(2-interval)sulfonyl]amino-3-[8-(2-interval)sulfonyl]amino-3-[8-(2-interval)sulfonyl]amino-3-[8-(2-interval)sulfonyl]amino-3-[8-(2-interval)sulfonyl]amino-3-[8-(2-interval)simidazolylaminomethyl)-1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-yl]carbonylamino]propionic 10 (S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[8-(2imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-yl]carbonylamino]propionic (S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino-15 3-[[8-(2-imidazolylaminomethyl)-1-oxa-2,7diazaspiro-[4,4]-non-2-en-3yl]carbonylamino]propionic acid, (S)-2-[(2-naphthyl)sulfonyl]amino-3-[[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-naphthyl)sulfonyl]amino-3-[8-(2-napht20 imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-yl]carbonylamino]propionic acid, (S)-2-[biphenylsulfonyl]amino-3-[[8-(2imidazolylaminomethyl)-1-oxa-2,7-diazaspiro-25 [4,4]-non-2-en-3-yl]carbonylamino]propionic acid, (S)-2-phenylsulfonylamino-3-[[7-benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-1-oxa-2,7diazaspiro-[4,4]-non-2-en-3-30 yl]carbonylamino]propionic acid, (S)-2-benzyloxycarbonylamino-3-[[7benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3yl]carbonylamino]propionic acid. (S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[7-35 benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-

	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-
5	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
10	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino-
	3-[[7-benzyloxycarbonyl-8-(2-
	pyridinylaminomethyl)-1-oxa-2,7-diazaspiro-
	[4,4]-non-2-en-3-yl]carbonylamino]propionic
15	acid,
	(S)-2-[(2-naphthyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	<pre>yl]carbonylamino)propionic acid,</pre>
20	(S)-2-[biphenylsulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(2-pyridinylaminomethyl)-
	1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
25	(S)-2-phenylsulfonylamino-3-[[7-benzyloxycarbonyl-
	8-(4,5-dihydroimidazol-2-yl)aminomethyl-1-oxa-
	2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-benzyloxycarbonylamino-3-[[7-
30	benzyloxycarbonyl-8-(4,5-dihydroimidazol-2-
	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	2-en-3-yl]carbonylamino]propionic acid,
	(S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(4,5-dihydroimidazol-2-
35	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	2-en-3-vllcarbonylaminolaronionic acid

	(S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(4,5-dihydroimidazol-2-
	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	2-en-3-yl]carbonylamino]propionic acid,
5	(S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-(4,5-dihydroimidazol-2-
	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	2-en-3-yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino-
10	3-[[7-benzyloxycarbonyl-8-(4,5-
	dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-
	diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2-naphthyl)sulfonyl]amino-3-[[7-
15	benzyloxycarbonyl-8-(4,5-dihydroimidazol-2-
•	yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	<pre>2-en-3-yl]carbonylamino]propionic acid,</pre>
	(S)-2-[biphenylsulfonyl]amino-3-[[7-
	benzyloxycarbonyl-8-8-(4,5-dihydroimidazol-2-
20	y1) aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-
	<pre>2-en-3-y1]carbonylamino]propionic acid,</pre>
	(S)-2-phenylsulfonylamino-3-[[8-(4,5-
	dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-
	diazaspiro-[4,4]-non-2-en-3-
25	yl]carbonylamino]propionic acid,
	(S)-2-benzyloxycarbonylamino-3-[[8-(4,5-
	dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-
	diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
30	(S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[[8-
	(4,5-dihydroimidazol-2-yl)aminomethyl-1-oxa-
	2,7-diazaspiro-[4,4]-non-2-en-3-
	yl]carbonylamino]propionic acid,
	(S)-2-[(2,6-dimethylphenyl)sulfonyl]amino-3-[[8-
35	(4 5-dibydroimidazol-2-v1)aminomethyl-1-oxa-

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- 2,7-diazaspiro-[4,4]-non-2-en-3yl]carbonylamino]propionic acid,
- (S)-2-[(2,6-dichlorophenyl)sulfonyl]amino-3-[[8-(4,5-dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-yl]carbonylamino]propionic acid,
- (S)-2-[(2,6-dimethyl-4-phenyl)phenylsulfonyl]amino-3-[[8-(4,5-dihydroimidazol-2-yl)aminomethyl-1oxa-2,7-diazaspiro-[4,4]-non-2-en-3yl]carbonylamino]propionic acid,
- (S)-2-[(2-naphthyl)sulfonyl]amino-3-[[8-(4,5-dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-yl]carbonylamino]propionic acid,
- 15 (S)-2-[biphenylsulfonyl]amino-3-[[8-(4,5-dihydroimidazol-2-yl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-yl]carbonylamino]propionic acid, and
- (S)-2-[(2,4,6-trimethylphenyl)sulfonyl]amino-3-[(8-20 (2-benzimidazolyl)aminomethyl-1-oxa-2,7-diazaspiro-[4,4]-non-2-en-3-yl]carbonylamino]propionic acid.
- 6. A method for the treatment of cancer

 25 metastasis, diabetic retinopathy, neovascular glaucoma, thrombosis, restenosis, osteoporosis, or macular degeneration which comprises administering to a host in need of such treatment a therapeutically effective amount of a compound of Claim 1-5.
 - 7. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound of Claim 1-5.

INTERNATIONAL SEARCH REPORT

Interr al Application No PCT/US 97/04567

A. CLASS IPC 6	IFICATION OF SUBJECT MATTER CO7D413/12 CO7D413/14 CO7D498	/10 A61K31/42		
According	to International Patent Classification (IPC) or to both national class	afication and IPC		
	S SEARCHED			
Minimum o	ocumentation searched (classification system followed by classification (CO7D)	ution symbols)		
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Dan	tion searched other than minimum documentation to the extent that	much documents are included in the fields of	essenad	
Document	non searched other than minimum documentation to the execut date	shen documents are includes in the ficial s	cartitor	
l I				
Electronic o	lats base consulted during the international search (name of data be	use and, where practical, search terms used)		
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	MENTS CONSIDERED TO BE RELEVANT		Dalaman Na	
Category *	Citation of document, with indication, where appropriate, of the	relevant passages	Relevant to claim No.	
A	WO 95 14683 A (THE DU PONT MERCK		1-4,6,7	
^	PHARMACEUTICAL COMPANY) 1 June 1		1 4,0,7	
	cited in the application			
	see page 249 - page 252; claims			
Α	EP 0 529 858 A (TAKEDA CHEMICAL	INDUSTRIES	1-4,6,7	
	LTD) 3 March 1993	_•		
ļ	see page 2, line 1 - line 31; cl	aims		
Α	WO 95 14682 A (THE DU PONT MERCK		1-4,6,7	
	PHARMACEUTICAL COMPANY) 1 June 1	995		
	see claims			
P,A	WO 96 37492 A (THE DU PONT MERCK		1-4,6,7	
	PHARMACEUTICAL COMPANY) 28 Novem	ber 1996		
	cited in the application see claims			
	see claims			
Furt	her documents are listed in the continuation of box C.	Patent family members are listed	in annex.	
* Special ca	tegories of cited documents:	T later document published after the int	ernational filing date	
"A" docum	ent defining the general state of the art which is not ered to be of particular relevance	or priority date and not in conflict wi cited to understand the principle or the	th the application but neary underlying the	
"E" cartier	document but published on or after the international	invention "X" document of particular relevance; the		
filing date cannot be considered novel or cannot "L" document which may throw doubts on priority claim(s) or involve an inventive step when the do			cument is taken alone	
citatio	which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the			
"O" document referring to an oral disclosure, use, exhibition or document is combined with one or more other such documents, such combination being obvious to a person skilled			ore other such docu- us to a person skilled	
	ent published prior to the international filing date but an the priority date claimed	in the art. "&" document member of the same patent	family	
Date of the	actual completion of the international search	Date of mailing of the international se	arch report	
4	July 1997	1 1. 07. 97		
Name and n	nailting address of the ISA	Authorized officer		
	European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Ripwik			
	Tcl. (+31-70) 340-2040, Tx. 31 651 epo nl. Fac: (+31-70) 340-3016	Henry, J		

INTERNATIONAL SEARCH REPORT

Ir national application No.

PCT/US 97/04567

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: Remark: Although claim(s) 6 is(are) directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
Claims Nox.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: In view of the large number of compounds which are defined by the wording of the claims, the search has been performed on the general idea and compounds mentioned in the examples of the description. Claims searched incompletely: 1-4,6,7
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

biformation on patent family members

Interr al Application No PCT/US 97/04567

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9514683 A	01-06-95	AU 1098095 A	13-06-95
MO 2214002 V		CA 2174838 A c	01-06-95
		CZ 9601419 A	13-11-96
		EP 0730590 A	11 - 09-96
		FI 962184 A	23-05-96
		HR 94 0 952 A	30-04-97
		HU 74690 A	28 - 01-97
		NO 962096 A	23-05-96
		PL 314591 A	16-09-96
•		SK 66696 A	06-11-96
		ZA 9409337 A	24-05-96
EP 0529858 A	03-03-93	AU 646966 B	10-03-94
Li 0323030		AU 2090892 A	25-02-93
		CA 2076619 A	24-02-93
		CN 1069730 A	10-03-93
		CN 1078968 A	01-12-93
		GR 1001405 B	30-11 -9 3
		HU 9500497 A	28-09-95
		JP 6025285 A	01-02-94
		US 5294713 A	15-03-94
WO 9514682 A	01-06-95	US 5446056 A	29-08-95
		AU 677481 B	24-04-97
		AU 1097895 A	13-06-95
		CA 2174415 A	01-06-95
		EP 0730589 A	11-09-96
		NZ 276631 A	24-06-97
		ZA 9409291 A	23-05-96
WO 9637492 A	28-11-96	AU 5876296 A	11-12-96